System-Meeter-Bar

System analyze, benchmark, traffic and overview tool

Made by NeoX / IT_Huskys

http://smb.it-huskys.com/

Created for version 3.4

Index

What is the “System-Meeter-Bar”?

The “System-Meeter-Bar” is/was designed to offer a solution for license friendly support and analyze tools who are compact and not related to EULA’s who require licensing for commercial usage. The SMB is a system data collector tool, system overview tool, benchmark and system report tool in one. You can use it for having an overview of your system next to your work, finding issues or testing the stability of your system via the build in benchmark, no matter if on a private system or in a commercial environment and usage.

System Requirements

CPU:	Dual Core 1 GHz+
HDD:	10 MB free space (can be used on portable storage device too)
RAM:	1 GB
OS:	Win10 – Win 11 .Net Core 8.0

EULA – User Agreement

1. Property assignment

The delivered software remains the property of the creator (S. Ehrentraut (Made by NeoX)). It is subject to the free license and may be used free of charge commercial and private.

2. Privacy Policy

This software does them any kind of information yet to be transferred data in any form, stored or analyzed, which is not the use of the software needed.

3. Applicable Law

All legal transactions or other legal relations with us understand the law of Germany. The CISG (CISG) and any other international conventions, even after being taken over into German law, shall not apply.

4. Damage Waiver

By confirming these terms and conditions is the user acknowledges that any claim for damages in the event of system damage or injury goes out by this software.

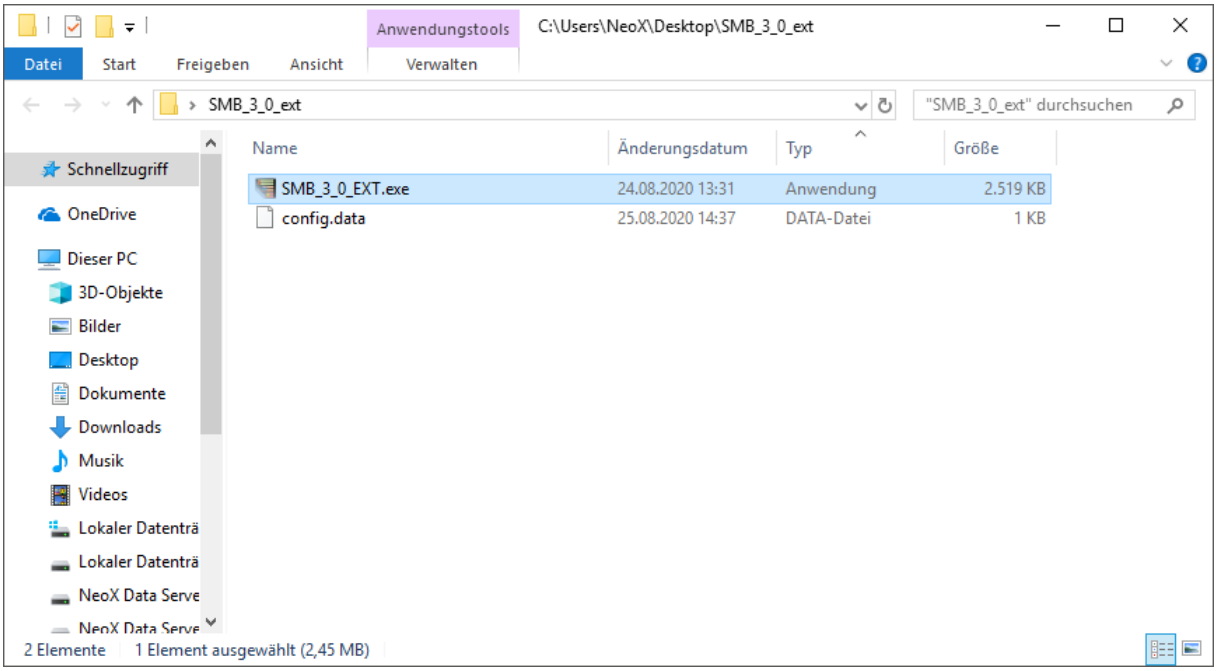
5. Modification of Terms and Conditions

We are entitled to these terms and conditions - provided they are introduced into the contractual relationship with the user - to unilaterally change the extent necessary to remedy subsequently arising equivalence disorders or to adapt to changing legal or technical environment. We will inform the user with notification of the content of the amended regulations relating to adaptation. The change is part of the contract if the customer after receipt of the notice of change to the inclusion in the contractual relationship opposite does not contradict within six weeks we in writing or text form.

6. Severability

Should individual provisions of the contract including these regulations be completely or partially invalid or should the contract have an unforeseen gap, the validity of the remaining provisions or parts of such provisions. Instead of the ineffective or missing regulations the respective legal regulations.

1.0 Files and startup

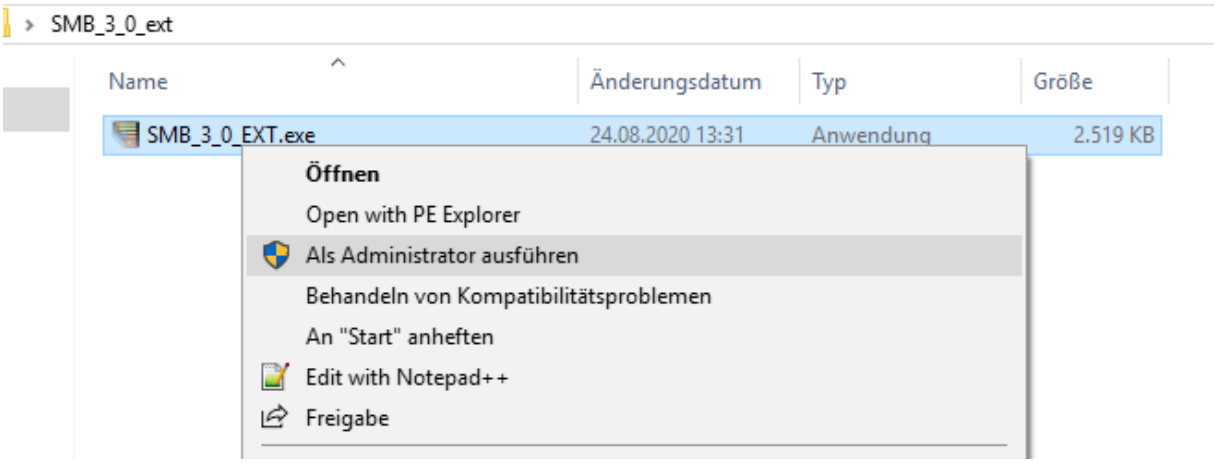


SMB_3_3_EXT.exe = The System-Meeter-Bar in version 3.3
config.data = config file to save the last applied user-settings (will be created after the start and is always located next to the main-app exe)

Please make sure the folder that the SMB is located in has write permissions.

1.1 Starting the SMB

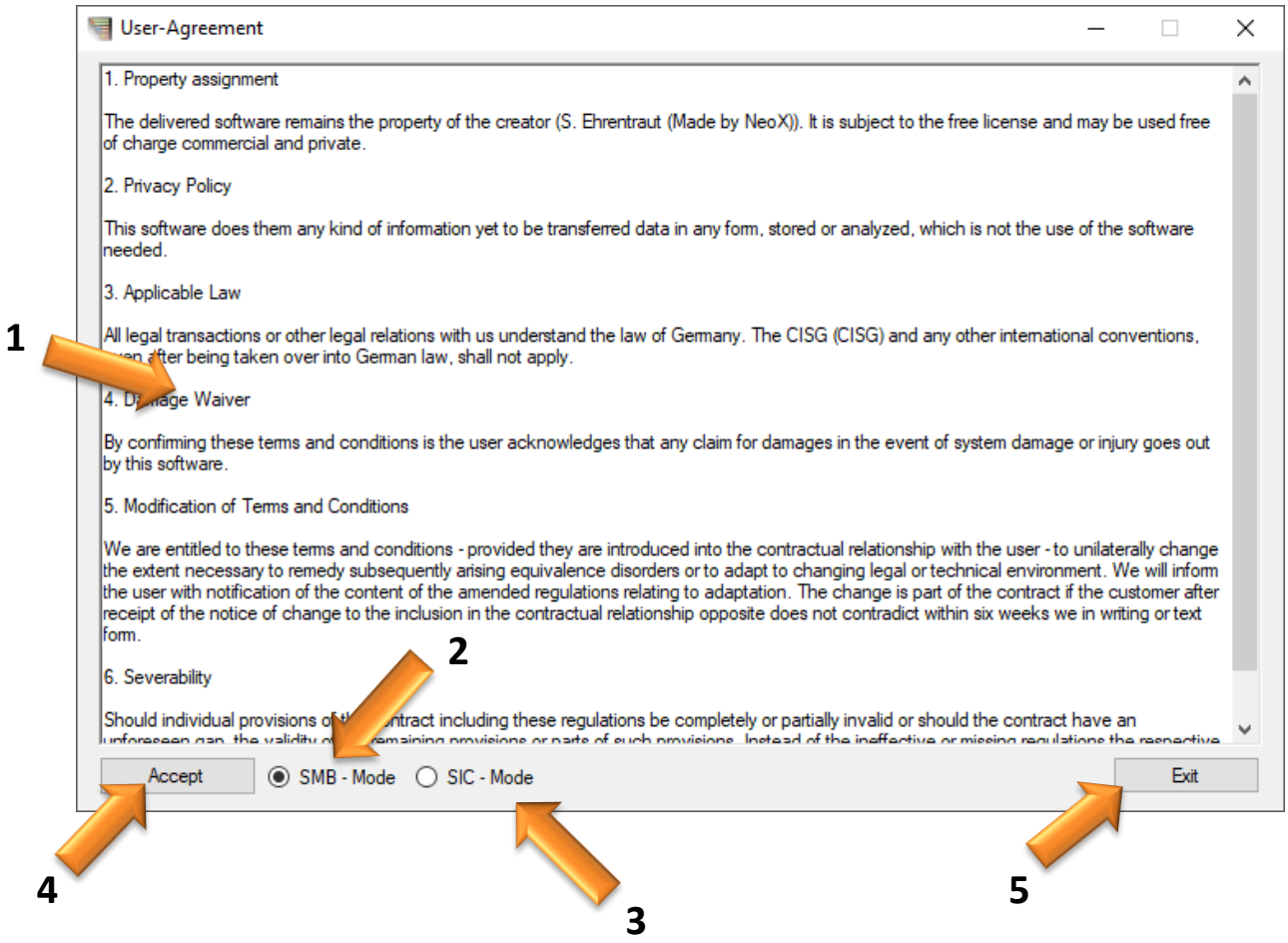
The SMB can be started as a normal User without special permissions but cannot use all Features when doing so, or as an admin to have full access to all its features.



To start the SMB as an admin, right click on the exe and select “Run as Administrator”.

1.2 User-Agreement and start mode selection

On the 1st startup of the SMB you will get EULA agreement form with the option to jump to a specific mode. When you select the SMB-Mode and agree the EULA this form will never be shown ever again.



1 = EULA content

2 = starts the SMB in its main form with the system-overview (see page 6)

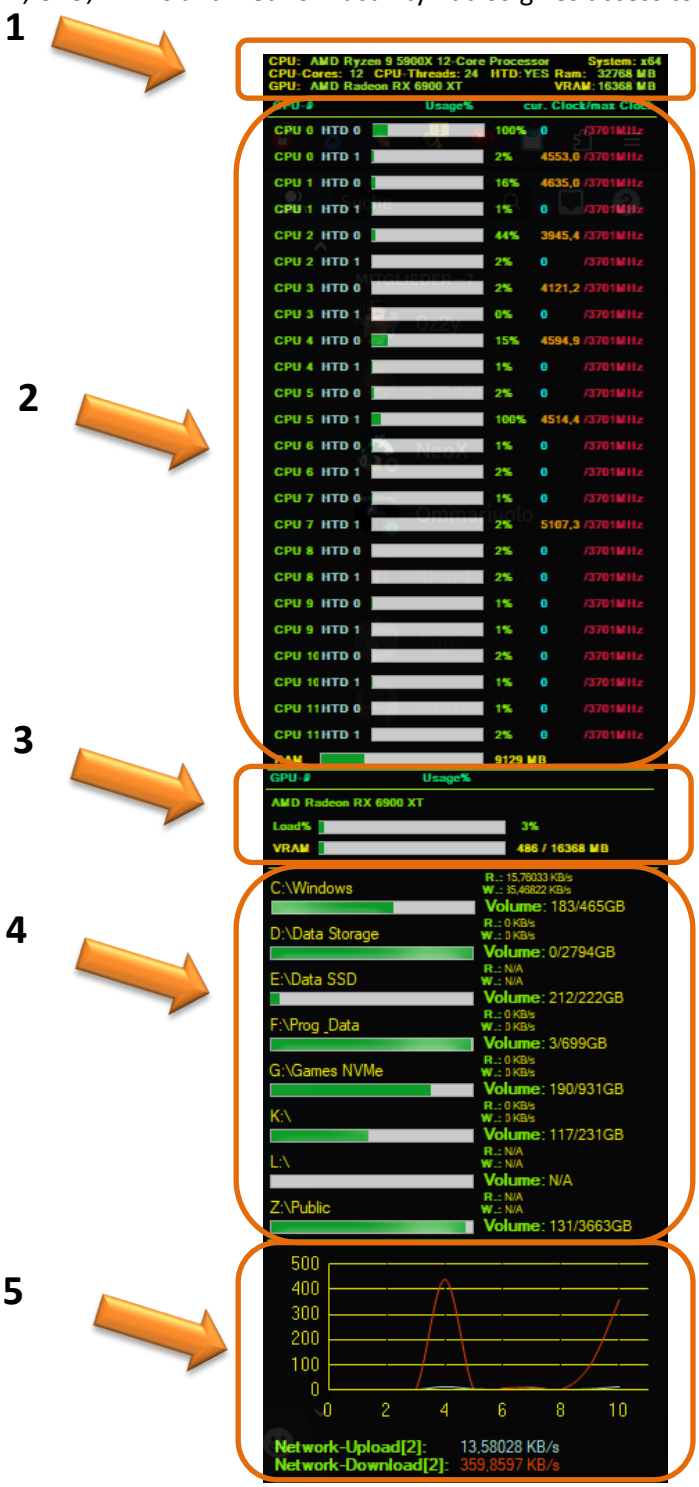
3 = starts the SMB directly into the SIC-Mode (see page 14)

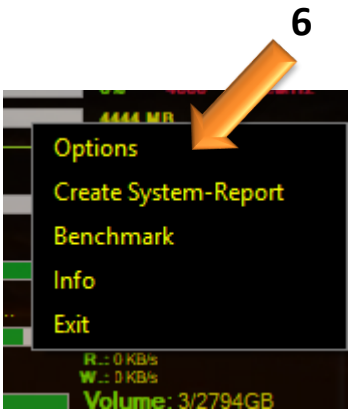
4 = Accepts the EULA and starts the SMB with the selected Mode

5 = Closes the application

2.0 System-Meeter-Bar

This is the Main-Form of the SMB that shows a live overview of the system with most important data of the system, CPU, HDD's and Network activity. It also gives access to all functions of the SMB.





1 = System information header (see page 7)

2 = CPU Performance (see page 8)

3 = GPU Performance (see page 9)

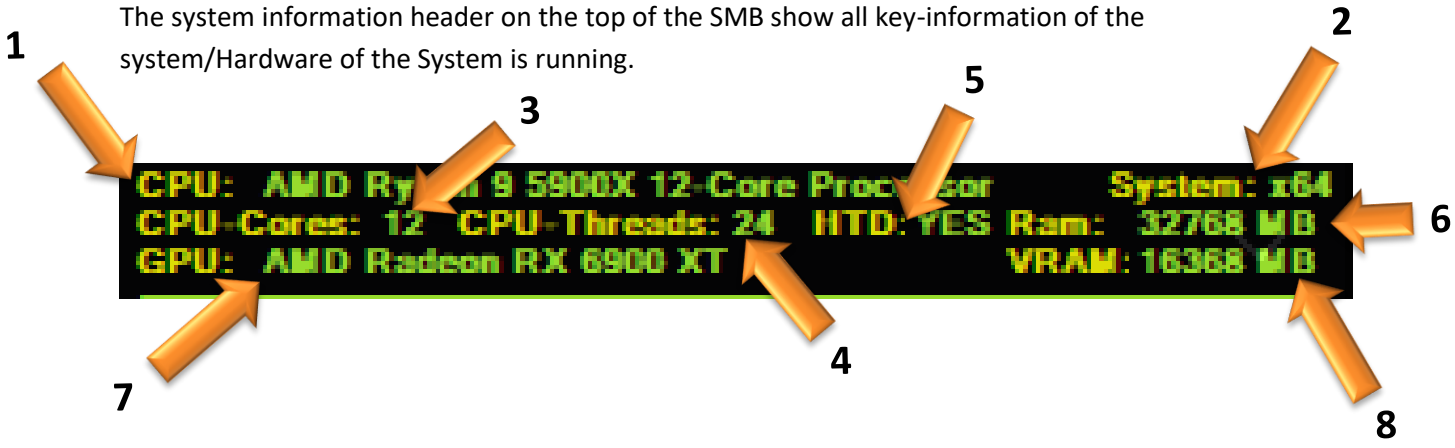
4 = HDD Performance (see page 10)

5 = Network Performance (see page 11)

6 = Right click opens the context menu with all the features of the SMB (see page 12)

2.1 System Information header

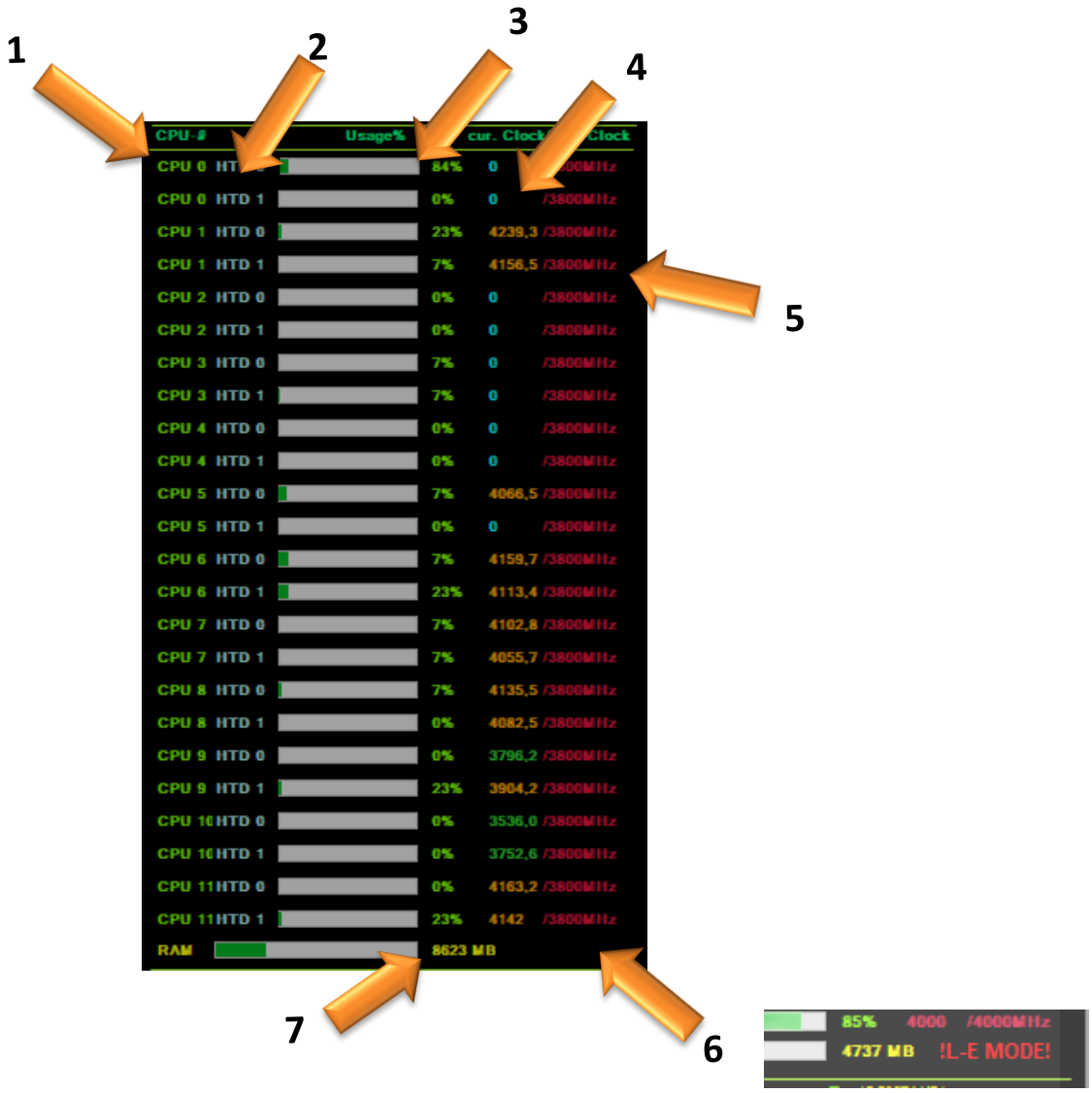
The system information header on the top of the SMB show all key-information of the system/Hardware of the System is running.



1 = shows the name of the main CPU of the system the SMB is running on (hover your mouse over it to see its full name)
2 = shows the system architecture of 32 or 64 bit
3 = shows the amount of physical cores (or modules) the CPU has and uses
4 = shows the amount of the Threads the CPU offers and the Windows system is working with
5 = shows if Hyper threading is used/activated or if all Threads are based on single physical cores
6 = shows the amount of installed and useable Ram in Megabyte
7 = shows the main display GPU of the system the SMB is running on (hover your mouse over it to get a display of all installed GPU's in the system with VRAM next to it)
8 = shows the amount of VRAM of the main GPU of the system the SMB is running on

2.2 CPU-Performance

This module shows you the live performance of your CPU and Ram usage. The SMB supports up to 64 core/thread CPU's.



1 = shows a list of all physical cores (or modules) the CPU has and its connected Thread (The SMB supports up to 64 core/thread CPU's)

2 = shows the Thread connected to the core or if there is no Hyper threading then that the thread is native to the core

3 = shows the current usage/load of the thread/core

4 = shows the current total frequency-speed that is applied to this core/thread of the CPU

Cyan = less than 50% of the standard CPU frequency

Green = more than 50% of the standard CPU frequency

Orange = active Turbo boost and above 100% of the standard CPU frequency

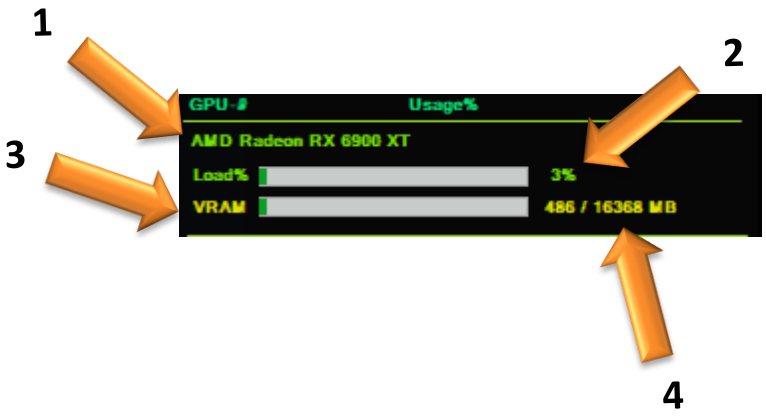
5 = shows the standard CPU clock-speed that is defined for this CPU

6 = "L-E-Mode" the low-end-mode shows when a system is fully loaded and the SMB switches to its LEM to reduce itself system load/usage to give the most possible performance to the task creating this system-load/usage

7 = shows the current usage of the RAM in MB

2.3 GPU Performance

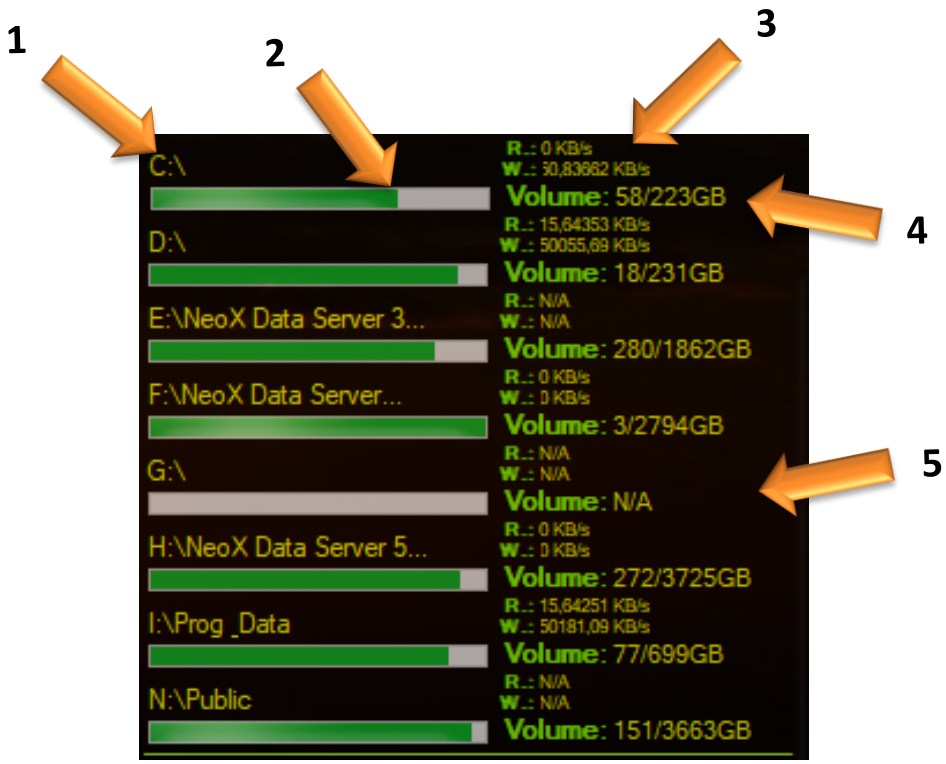
In this module you can see your current GPU load and usage. This module will always measure the currently active main-GPU of the system. It displays the load and VRAM load of the main GPU of the system.



1 = Shows the name of the main GPU(s) of the system that will be measured
2 = Shows the current load/usage of the main GPU of the system
3 = Shows the current amount of dedicated VRAM that is used of the main GPU of the system
4 = shows the total amount of dedicated VRAM, of the main GPU of the system

2.4 HDD Performance

This module shows you all storage devices in your System and connected to the system. It can show up to 30 devices (internally and externally connected) and auto/live expands on new devices getting added or removed. So you can just connect an external storage device and the SMB will auto expand while running.

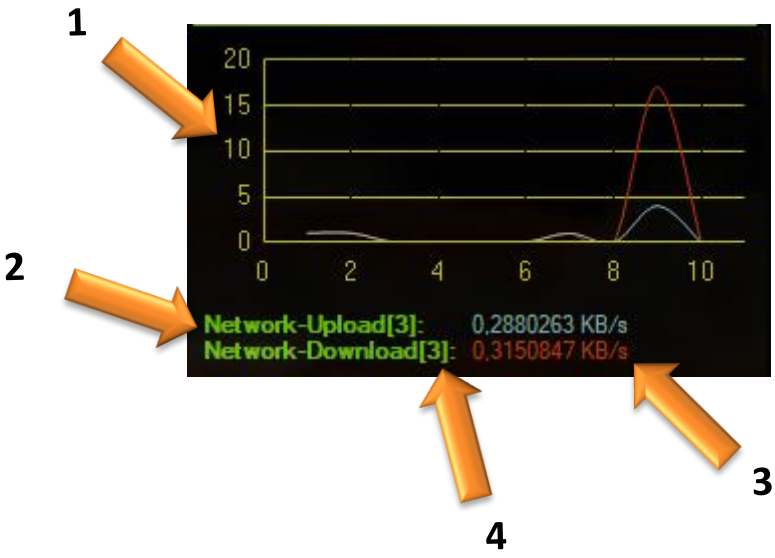


1 = shows the name of the storage device
2 = shows the used storage of the device
3 = shows the current Read and Write speeds/loads of the storage device (if there is a permission issue or wrongly configured WMI it will only show N/A)
4 = shows the amount of used and free storage in GB
5 = Drives like DVD, Blu-Ray or Card Reader who are empty will be shown as N/A until they are used

By clicking on any of the devices listed there you open them up in your windows explorer. With that feature you can quick jump to any storage device of your choice.

2.5 Network Performance

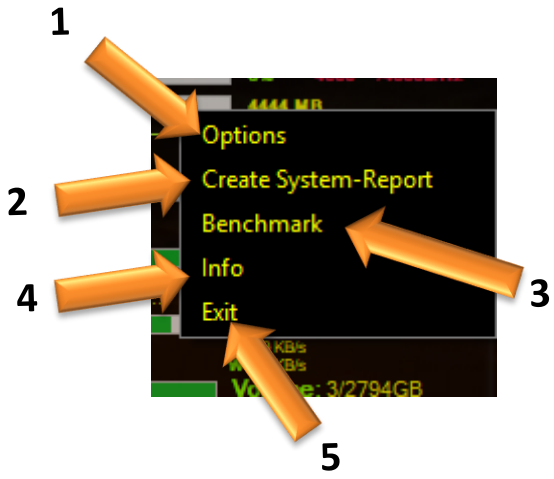
In this module you can see your current Network traffic and load/usage. It can show the load of up to 10 active Network connections.



1 = Shows the current total network load/usage as a graph with a timespan of the last 10s
2 = Shows the current amount of traffic in the Upload in KB/s
3 = Shows the current amount of traffic in the Download in KB/s
4 = shows the amount of active network connections the traffic is based on

2.6 Context Menu

You can trigger the Context-Menu by right clicking on the Mainform SMB.



1 = opens the options (see page 13)

2 = opens the System-Report creator (see page 15)

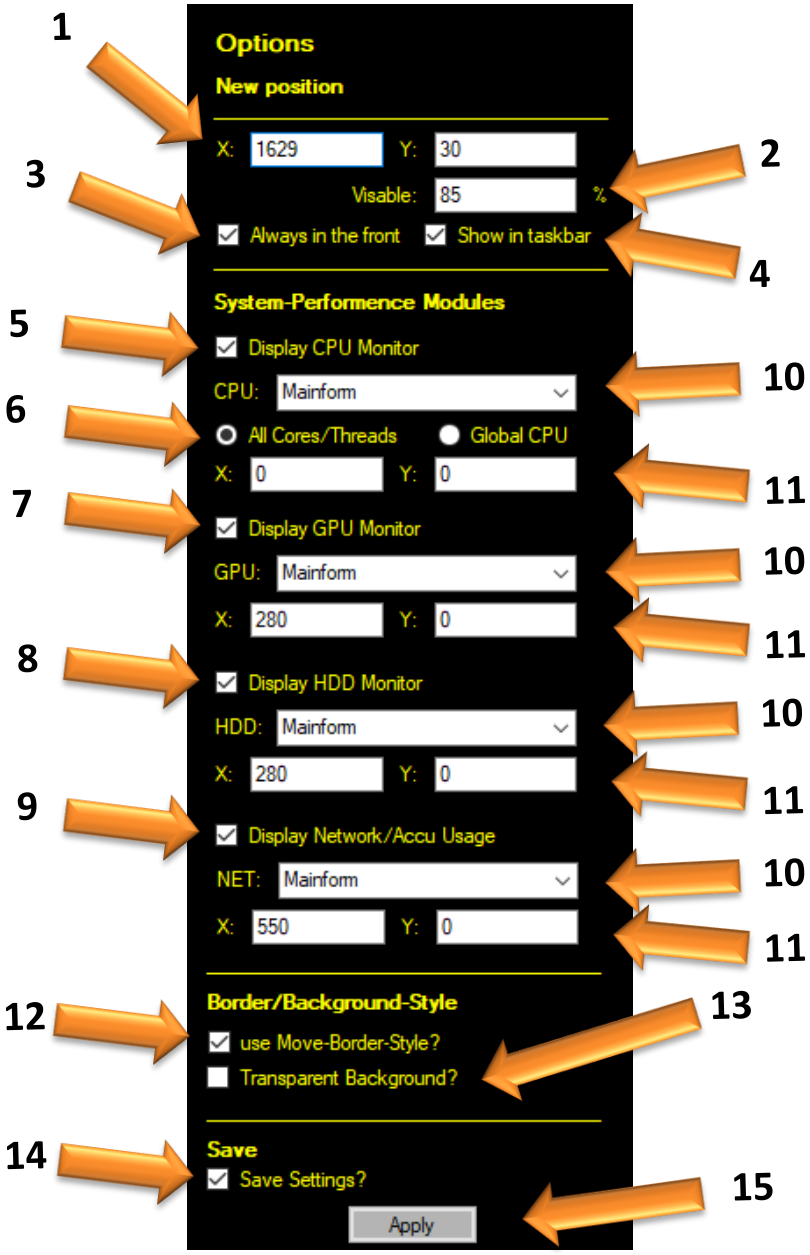
3 = opens the Benchmark (see page 18)

4 = opens the info of the SMB (see page 14)

5 = closes the SMB and all Tools connected to it

2.7 Options

Here in the options you can adjust any visuals of the SMB how much you like.



1 = sets the coordinates where the main form SMB will be placed when not in Move-Border-Style
2 = sets the visibility of the SMB. The lower the value the more transparent is the form
3 = always before other windows and apps
4 = shows the icon in the taskbar
5 = Activate/show the CPU-Module
6 = Switch CPU Module Detail<>Total
7 = Activate/show the HDD-Module
8 = Activate/show the NETWORK-Module
9 = Activate/show the GPU-Module
10 = show the Module in Main form or as a single window
11 = sets the coordinates of the Module in single window mode
12 = activate the Move-Border-Style
13 = make the Background transparent
14 = save the setting on SMB exit
15 = apply the changes and settings

2.8 Info-Form

This little windows show the License information and version.

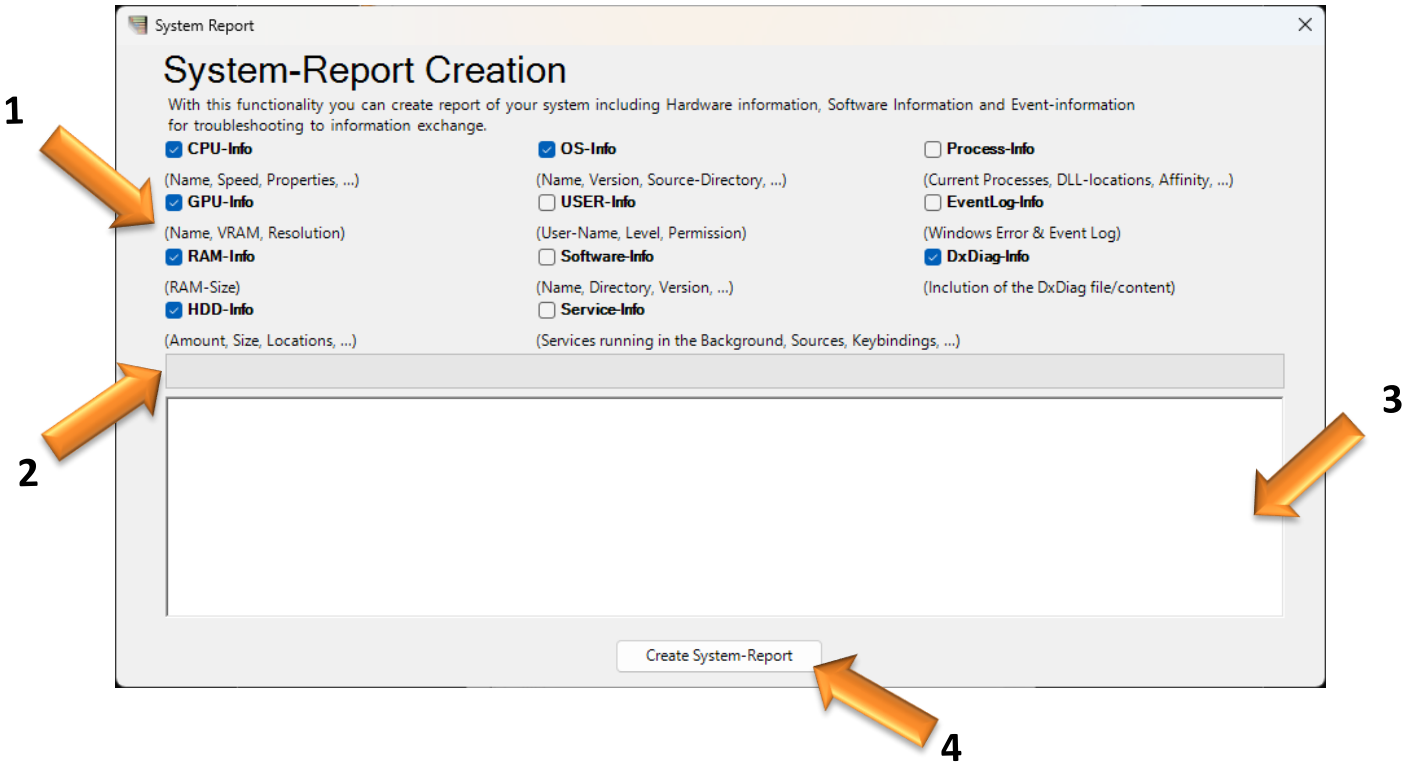
1 = version and created date of the SMB

2 = closes the info window

3 = Open the Website of the SMB and shows the last versions of the software

3.0 System-Report Creator

With this feature you can create a custom configured System-Report for the system the SMB is executed on with all Hardware data, Software data and event-information for trouble search and analyses.

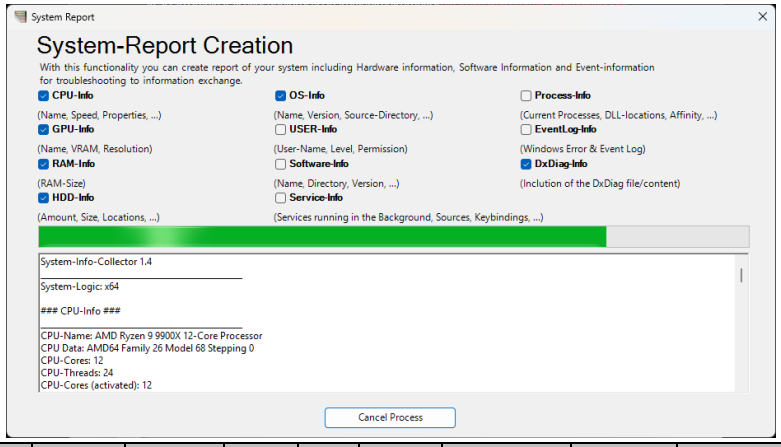


1 = Data collection settings of what should be collected and saved

2 = shows the progress of the data collection

3 = shows the current collected data

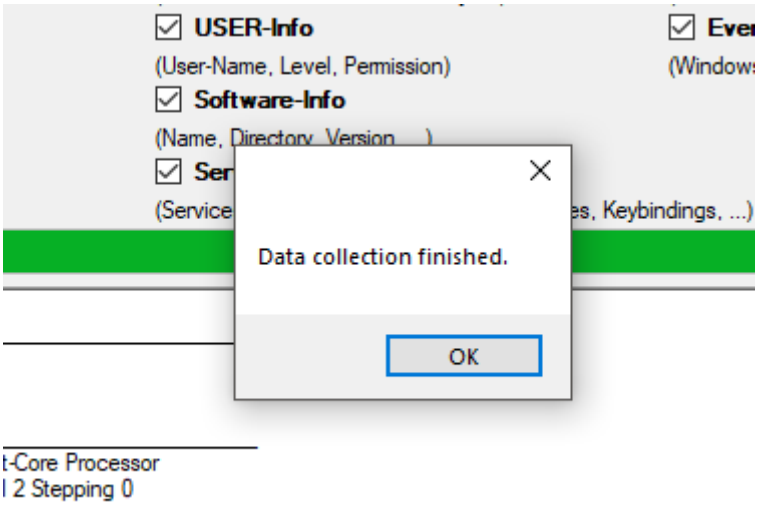
4 = starts the data collection process based on the settings (please make sure to have the needed permissions for the data that has to be collected)



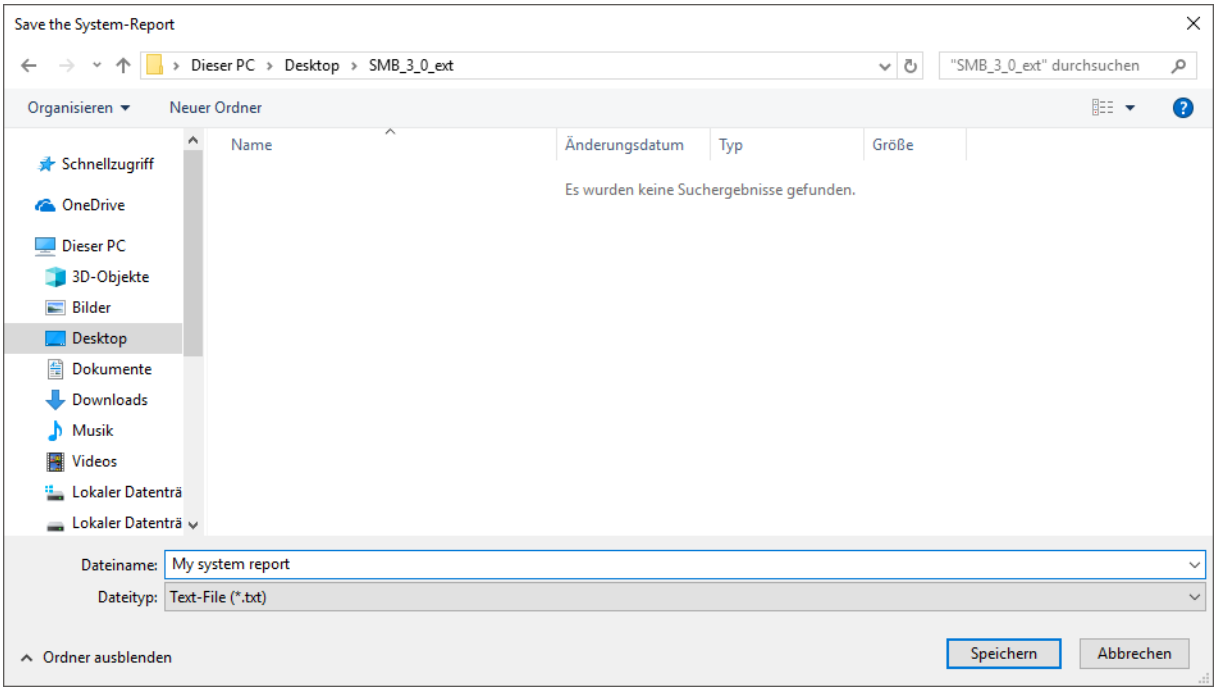
	CPU	GPU	RAM	HDD	OS	USER	Software	Service	Process	Event-Log	DXDiag
Normal-User	YES	YES	YES	YES	YES	YES	NO	NO	NO	NO	YES
Admin-permission	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

3.1 Create and Save a SIC

After configuring the SIC and starting the collection task, you will receive a message when the task is complete.



Depending on the speed of your Hardware and collection settings it can take 1-5min in total.
After the task is finished you will be able to save the system-report on a location of your choice in form of an easy to read txt-file.

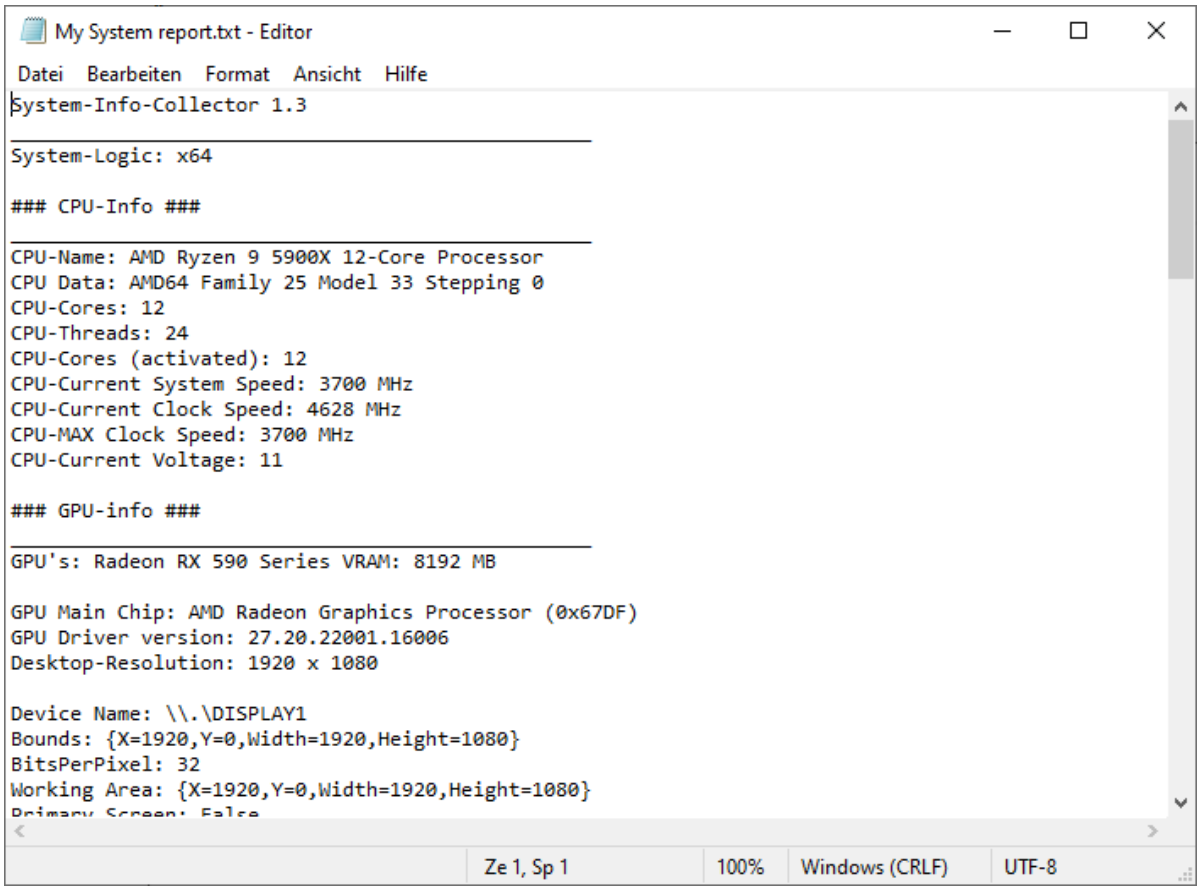


Just select a location where you have the write permission. The System-Report has with full collection settings a size of around 2-50 MB max. Because of its simple text (txt) file format it can be read and opened by almost every app that supports text editing.

When you started the SMB in the SIC mode, the SMB will close itself after the Report is created.

3.2 The System-Report file

The System-Report file contains all information about the system based on the collection configuration.

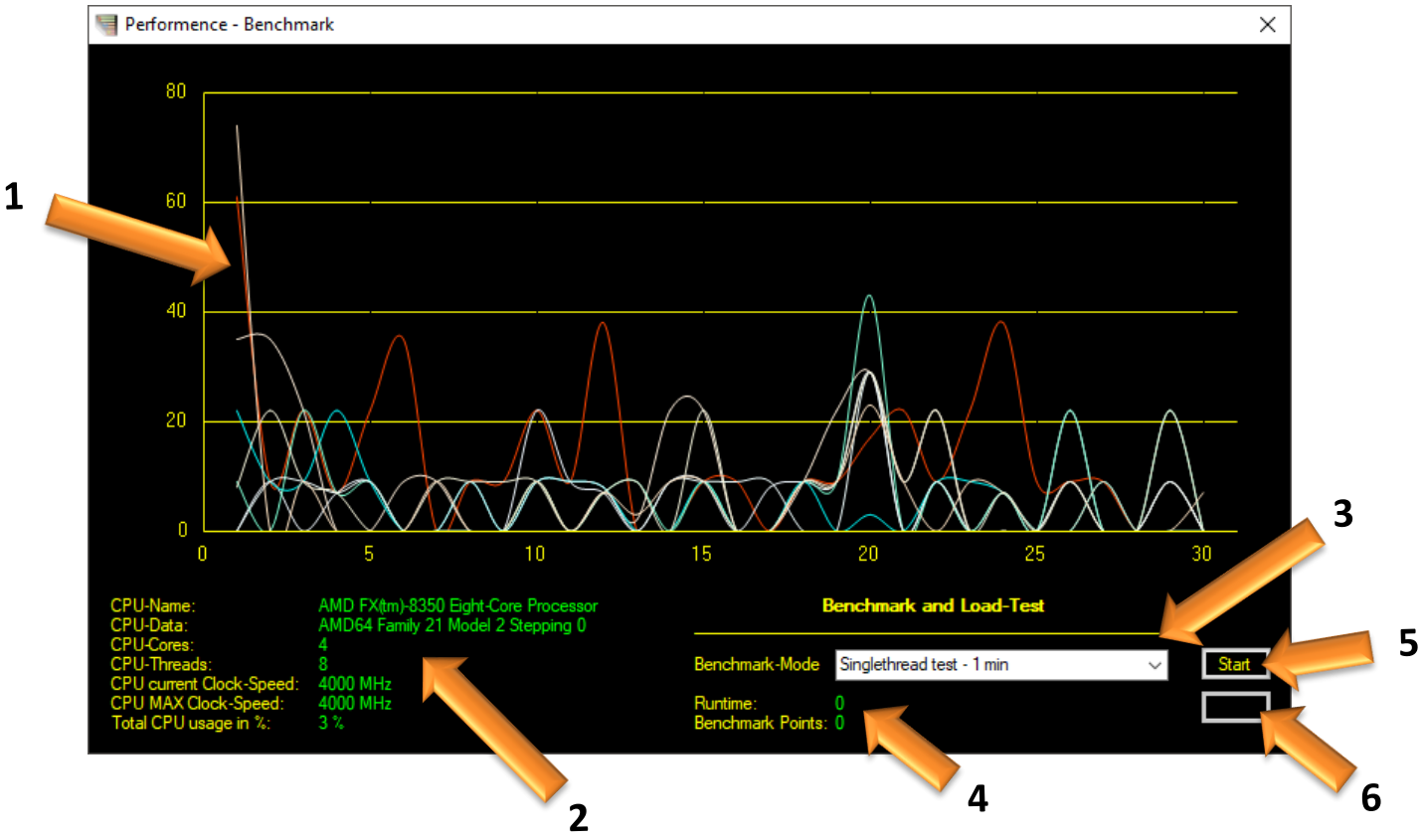


If you want to jump to a specific point of the data-report, just search for “###” in your text-editor of choice.

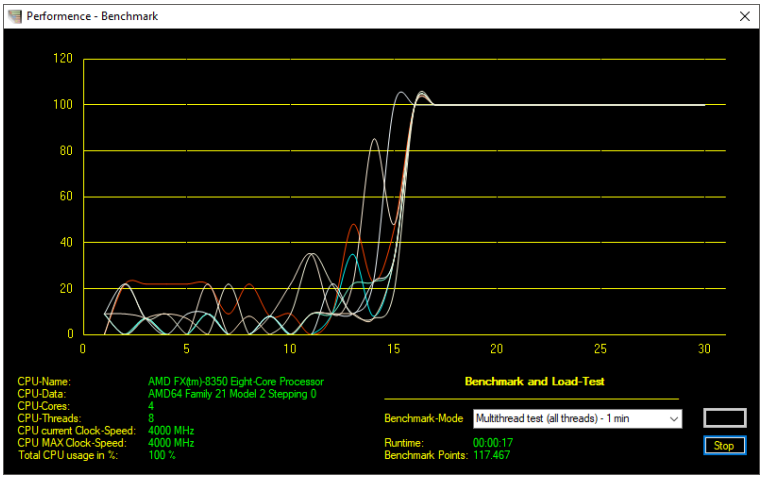
You can now send/share this report with these who need it to help you or you want to show it to.

4.0 Benchmark

The SMB comes with an own build in Benchmark feature to stress-test the system for heat or power issues but can also score the CPU power of a system to compare it to others.



1 = Live graph of all CPU threads of the load/usage of the system
2 = Live CPU information with current clock-speed and total usage/load
3 = selection of the Benchmark mode and time
4 = runtime of the benchmark and gathered points of the Benchmark
5 = starts the Benchmark depending on the selected mode and time
6 = stops the currently running Benchmark (if running)



Reference Points:

AMD FX 8350:
Single thread 1 min: 81.471
Multi thread 1 min: 542.355

Intel I7-6700K:
Single thread 1 min: 165.298
Multi thread 1 min: 1.163.434

Intel I7-10700:
Single thread 1 min: 172.055
Multi thread 1 min: 2.268.959

Benchmark results overview: http://smb.it-huskys.com/benchmark.html

4.1 Benchmark Result-Table

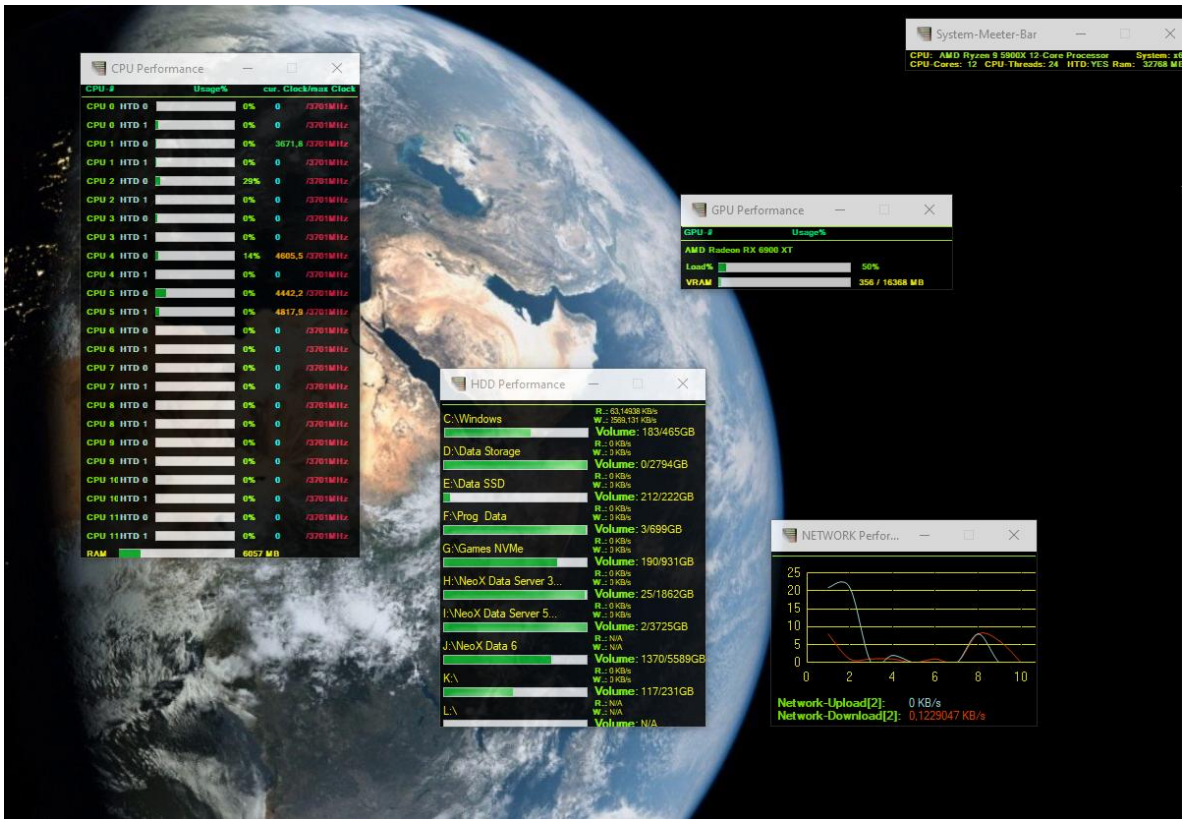
The SMB comes with its own built-in benchmark tool to stress-test the system for heat or power issues but can also score the CPU power of a system for comparison with others. Here is a collection of CPU's tested with the SMB for comparison of system performence and power. (Higher = better, sorted by Singlethread result increasing)

CPU	Singlethread 1 min	Multithread 1 min
Intel Atom CPU Z3735F	6,478	14,385
AMD Phenom2 x6 1075T	79,483	402,038
AMD FX 8350	81,471	542,355
Intel I5-2500K	108,079	360,997
Intel I7-4870HQ	116,805	809,127
Intel I3-4160	119,705	424,352
Intel I7-7700HQ	124,316	
Intel Xeon E3-1231 v3	126,622	907,029
Intel I7-6900K	127,023	1.865.188
Intel I5-8250U	129,041	914,572
AMD Ryzen 7 2700U	137,810	734,877
Intel I7-4790K	145,298	1.022.464
Intel I5-8400	145,323	865,475
AMD Ryzen 5 3500U	145,875	748,047
AMD EPYC Processor (with IBPB)	146,848	3.188.682
Intel I7-9750H	148,451	1.639.078
Intel I7-8809G	150,197	580,141
AMD Ryzen 5 1600X	152,141	1.273.088
AMD Ryzen 5 2400G	154,080	841,535
AMD Ryzen 7 1700	154,992	1.657.870
AMD Ryzen Threadripper 1950X	156,186	
Intel I7-2600K	156,380	1.083.537
AMD Ryzen 7 2700X	158,074	1.670.866
AMD Ryzen 5 2600	159,573	1.302.772
Intel I7-8565U	163,875	912,912
Intel I7-6700K	165,298	1.163.434
Intel I7-8700K	166,933	1.858.636
Intel I7-10700	172,055	2.268.959
Intel I7-7700K	186,171	1.389.470
AMD Ryzen 5 3600	235,815	1.533.293
AMD Ryzen 7 3700X	240,702	2.009.141
AMD Ryzen 7 4800H	240,880	2.066.565
AMD Ryzen 9 3900X	255,138	3.098.938
AMD Ryzen 7 3800X	256,896	2.108.957
AMD Ryzen 9 5900X	296,485	5.638.640
AMD Ryzen 9 5950X	297,113	7.836.749

Updated Benchmarks can be found here: http://smb.it-huskys.com/benchmark.html

5.0 Credits

Thank you for choosing the System-Meeter-Bar in version 3.3.



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