Troubleshooting Computer

My Hardware

RAM G.skill 6400mghz 2x16gb
GPU Rtx 4090 trio 24gb
CPU i9 13900k
MAINBOARD Z790 GAMING X AX

Stutters/Lagspikes and the logs

Everytime i play Deep rock galactic or CS2 i get the problem that it feels like the shaders are getting compiled everytime after i restart the game.

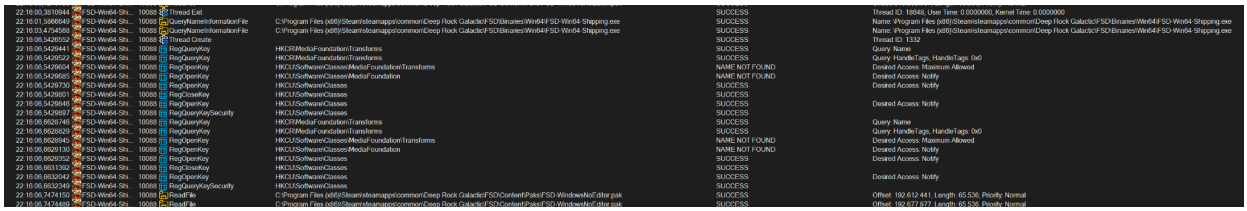
Clip with lag -> https://youtu.be/bF_PYnXUWGE

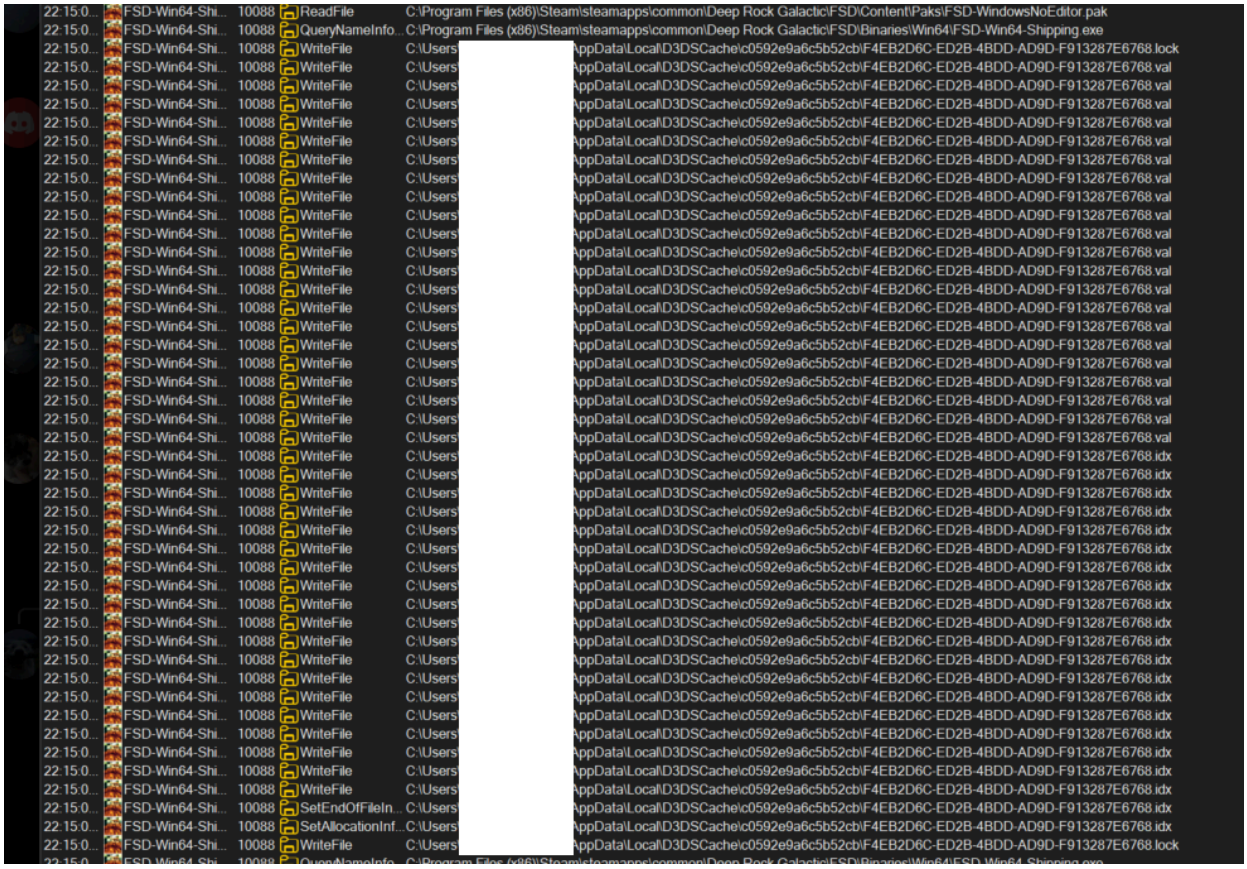
In the clip I uploaded you can see that I get a big lag spike every first time I kill this green mob, the same lag Spike will only occur again after restarting the game.
I had the same issues in other games too, and I got tiny stutters while playing and I think they are somehow correlated to this issue.

While i got this lag spike i ran 2 softwares to Capture what happened



First i got this, this is capturing the CPU thread load, Gpu load and FPS
Then i tried to log what the game is doing whenever i get the stutters



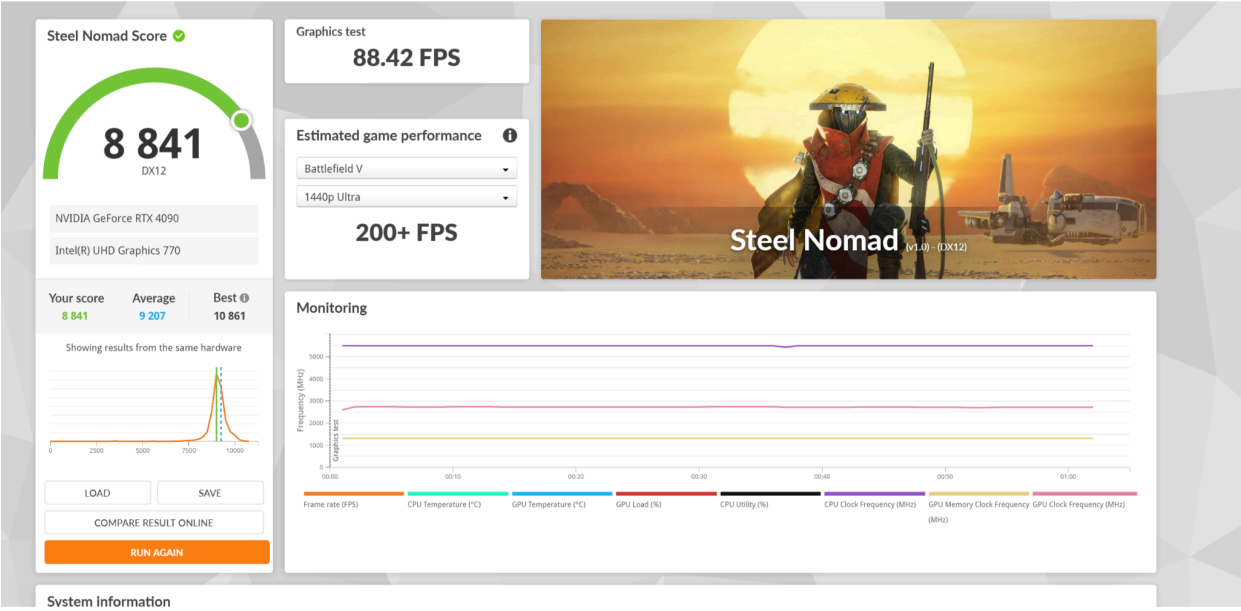


Everytime something is accessing my SSD in a way that it's Writing something on it, my game starts to stutter.
It's something inside the D3DSCache, that's why I thought that it's maybe a problem with my GPU.

Benchmarks

Cuz i thought that something of my hardware may be broken i tried to run some benchmarks

GPU



Not a singular stutter, why I think that my GPU is not the problem.

CPU

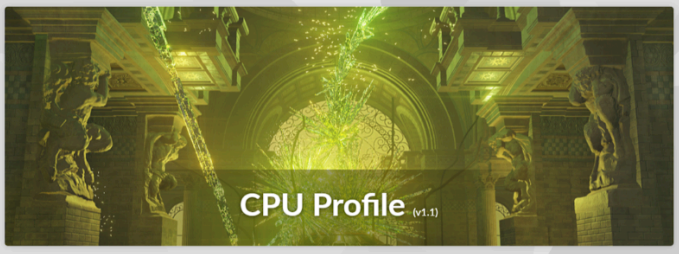
CPU Profile

LOAD | SAVE

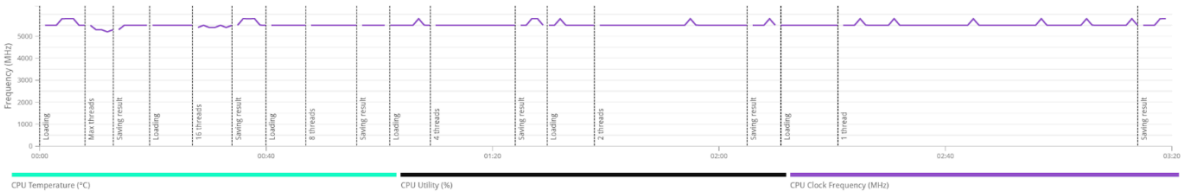
COMPARE RESULT ONLINE

RUN AGAIN

Max threads	16 threads	8 threads	4 threads	2 threads	1-thread
15 348	11 067	8 256	4 530	2 299	1 161



Monitoring



System information

GPU #1	NVIDIA GeForce RTX 4090	**CPU**	13th Gen Intel Core i9-13900K	**Time**	2024-11-10 17:58 +01:00
Display #1	\\.\DISPLAY1 (3840 × 2160, 150% DPI scaling)	**GUI**	v2.29.8294 s64	**SystemInfo**	v5.75.1261
Display #2	\\.\DISPLAY2 (2560 × 1440, 100% DPI scaling)				
GPU #2	Intel(R) UHD Graphics 770				

Show details

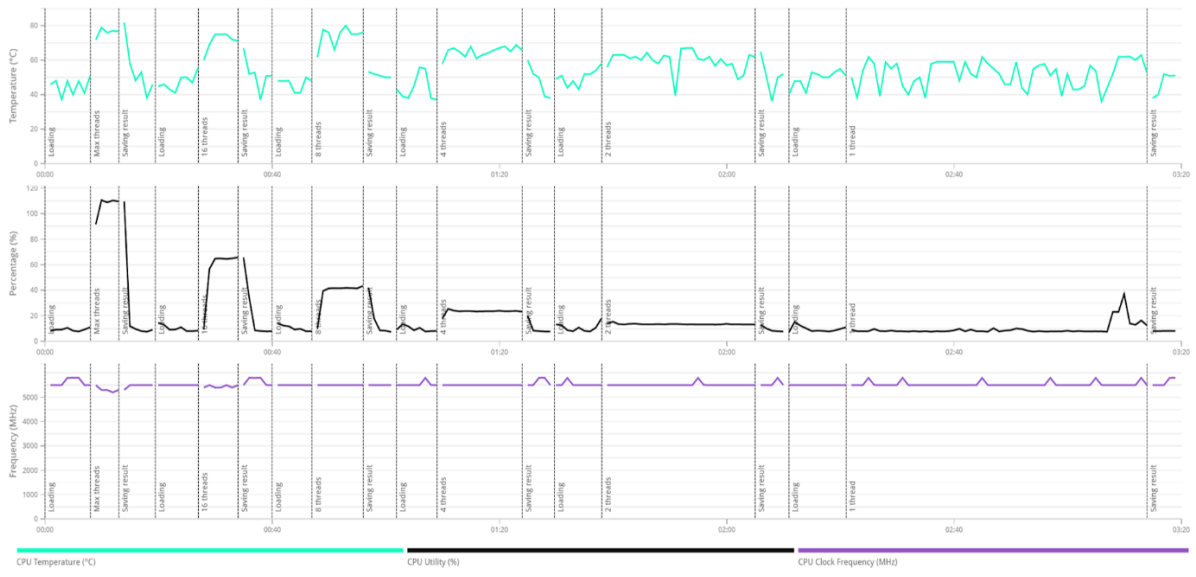
Settings used

GPU	NVIDIA GeForce RTX 4090
Display	\\.\DISPLAY1 Generic PnP Monitor
GPU connected to display	true

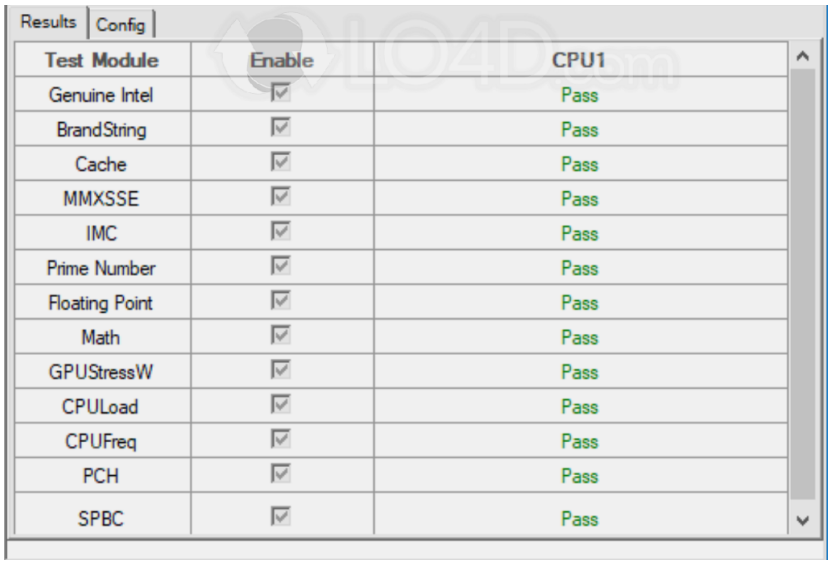
Detailed scores

Max threads	15 348	**16 threads**	11 067	**8 threads**	8 256
Average simulation time per frame	22.8 ms	**Average simulation time per frame**	31.6 ms	**Average simulation time per frame**	42.4 ms
4 threads	4 530	**2 threads**	2 299	**1-thread**	1 161
Average simulation time per frame	77.3 ms	**Average simulation time per frame**	152.2 ms	**Average simulation time per frame**	301.3 ms

Detailed monitoring



Here again, I would think that there is no problem.
I even tested with a new CPU and the issue persisted



Test Module	Enable	CPU1
Genuine Intel	☑	Pass
BrandString	☑	Pass
Cache	☑	Pass
MMXSSE	☑	Pass
IMC	☑	Pass
Prime Number	☑	Pass
Floating Point	☑	Pass
Math	☑	Pass
GPUStressW	☑	Pass
CPULoad	☑	Pass
CPUFreq	☑	Pass
PCH	☑	Pass
SPBC	☑	Pass

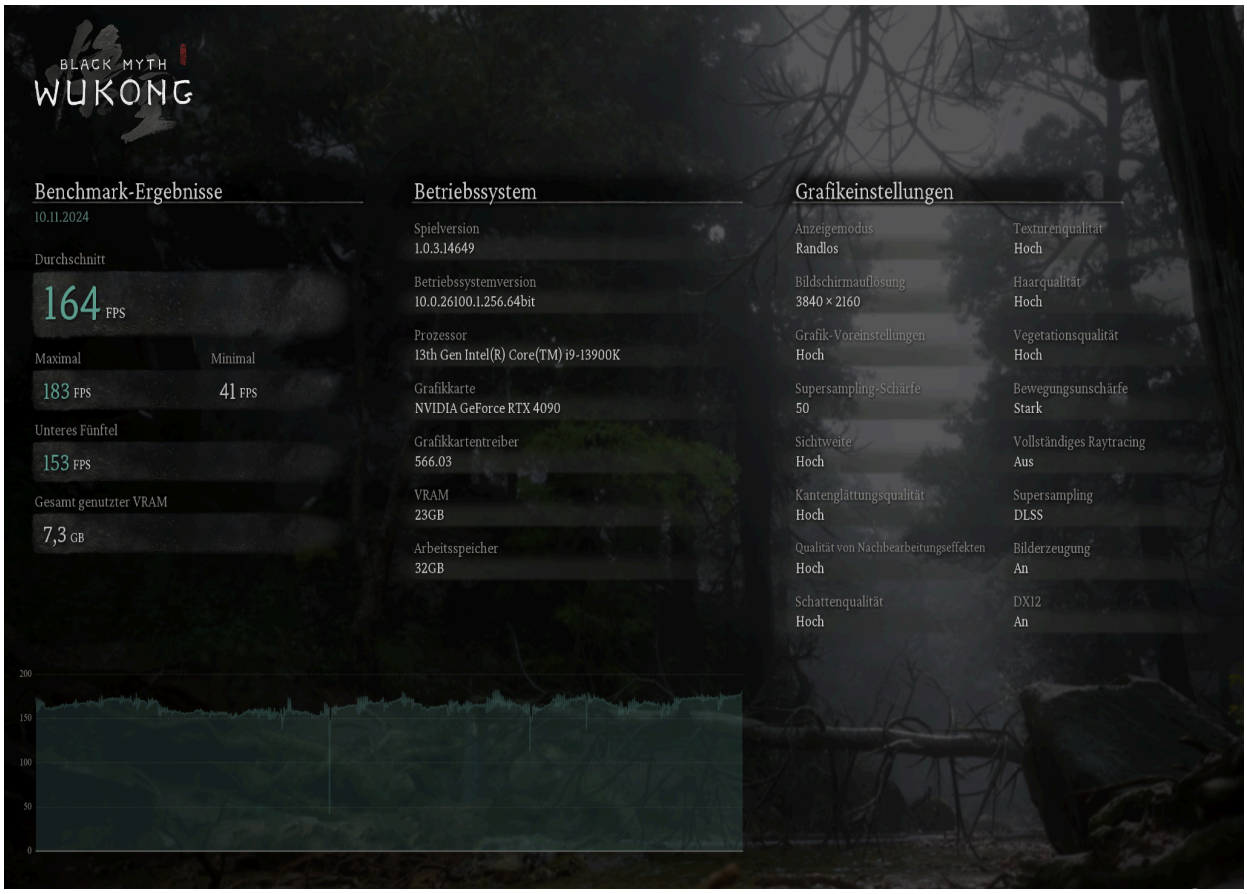
M.2 SSD


CrystalDiskMark 8.0.5 x64 [Admin]
Datei Settings Profile Theme Hilfe Sprache(Language)
All
5
1GiB
C: 7% (125/1862GiB)
MB/s
Read (MB/s)
Write (MB/s)
SEQ1M Q8T1
6918.20
6769.76
SEQ1M Q1T1
4100.98
5409.59
RND4K Q32T1
1122.42
889.36
RND4K Q1T1
80.80
357.35
CrystalDiskInfo 9.4.4 x64
File Edit Function Theme Disk Help Language
Good 43 °C C:
Good 25 °C D:
Good 23 °C E:
KINGSTON SFYRD2000G : 2000,3 GB
Health Status
Good 97 %
Temperature
43 °C
Firmware EIFK31.6
Serial Number 50026B768633D942
Interface NVM Express
Transfer Mode PCIe 4.0 x4 | PCIe 4.0 x4
Drive Letter C:
Standard NVM Express 1.4
Features S.M.A.R.T., TRIM, VolatileWriteCache
Total Host Reads 55747 GB
Total Host Writes 65476 GB
Rotation Rate ---- (SSD)
Power On Count 794 count
Power On Hours 7338 hours
ID Attribute Name Raw Values
01 Critical Warning 00000000000000
02 Composite Temperature 00000000000142
03 Available Spare 00000000000064
04 Available Spare Threshold 0000000000000A
05 Percentage Used 00000000000003
06 Data Units Read 00000006F7EA64
07 Data Units Written 000000082F3BE4
08 Host Read Commands 00000020B9C562
09 Host Write Commands 00000029B9FE60
0A Controller Busy Time 0000000000064F
0B Power Cycles 0000000000031A
0C Power On Hours 00000000001CAA
0D Unsafe Shutdowns 00000000000014
0E Media and Data Integrity Errors 00000000000000
0F Number of Error Information Log Entries 00000000000E22

RAM

I used the Windows Memory Diagnostic tool to test my 2 RAM sticks and it found no errors.

Game Benchmark



Unlike the other benchmarks, there are some stutters here again.

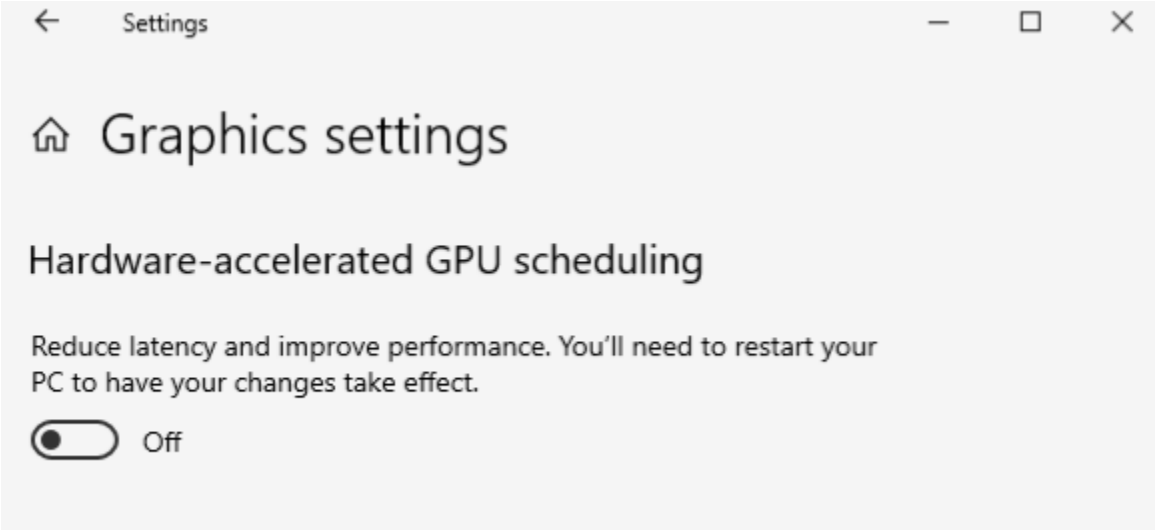
Troubleshoot

I tried to use Older GPU drivers, and tried the newest GPU Driver. (With DDU)
I Reseted my Windows 11 with a USB and installed a Newer Windows 11 version.

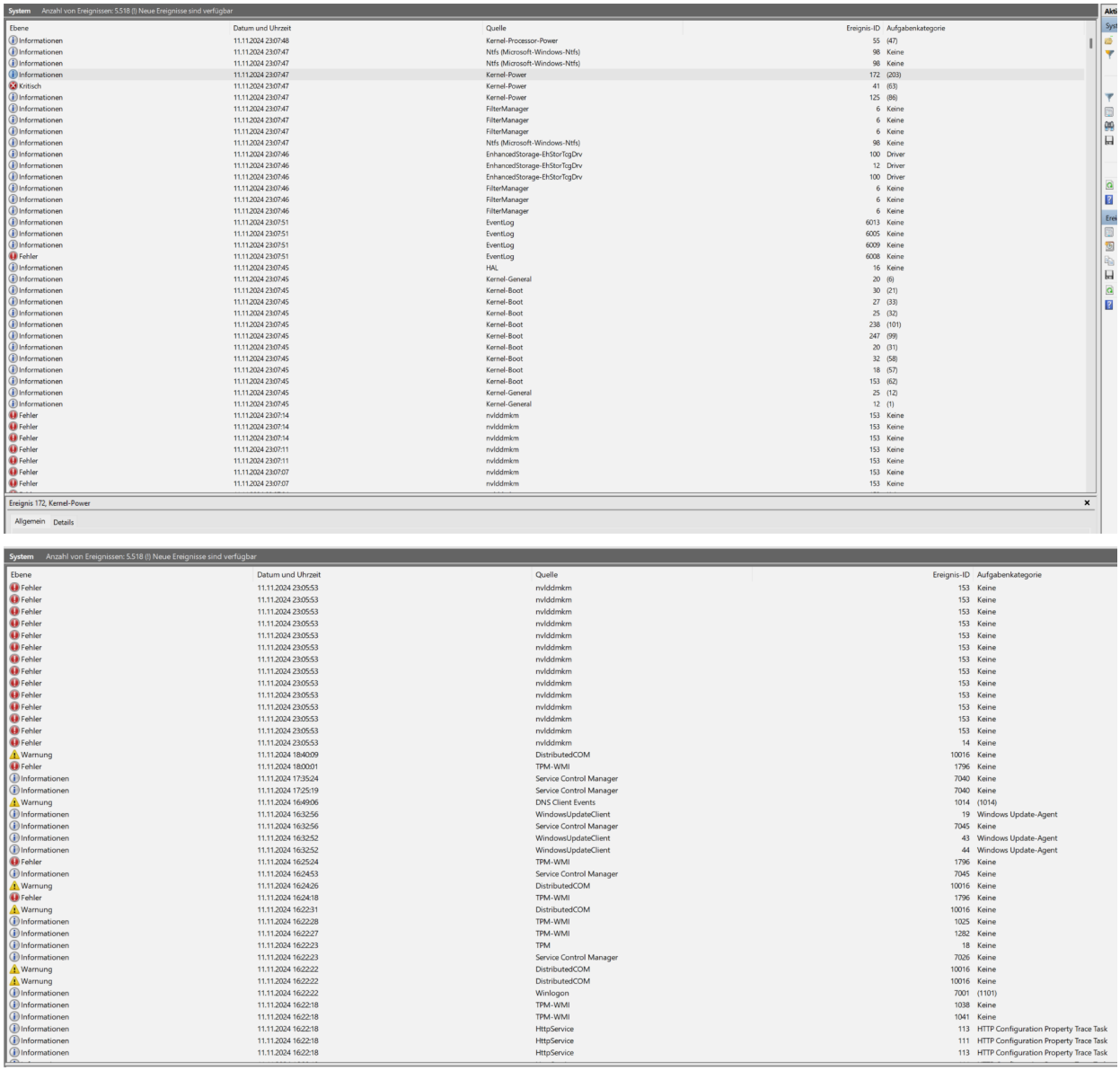
I reinstalled all drivers.
I Installed a new BIOS (F11)
I tried to clean my Shader cache
I tried Multiple Game Graphic Settings (DX11 on/off, DX12 on/off, Fullscreen on/off)
I tried XMP on/off
I tried windows on another SSD same problems
I tried playing without my 4090 GPU instead i disabled it and used my iGPU (issue persist)

The Crash

I turned hardware accelerated GPU scheduling off to test something.
That would mean that my CPU had more to do in the OS.



I started playing Videogames with it and out of nowhere my screens turned black and I couldn't do anything except turn off the Computer.



System Anzahl von Ereignissen: 5.518 (!) Neue Ereignisse sind verfügbar

Ebene	Datum und Uhrzeit	Quelle	Ereignis-ID	Aufgabenkategorie
Informationen	11.11.2024 23:07:48	Kernel-Processor-Power	55	(47)
Informationen	11.11.2024 23:07:47	Ntfs (Microsoft-Windows-Ntfs)	98	Keine
Informationen	11.11.2024 23:07:47	Ntfs (Microsoft-Windows-Ntfs)	98	Keine
Informationen	11.11.2024 23:07:47	Kernel-Power	172	(203)
Kritisch	11.11.2024 23:07:47	Kernel-Power	41	(63)
Informationen	11.11.2024 23:07:47	Kernel-Power	125	(86)
Informationen	11.11.2024 23:07:47	FilterManager	6	Keine
Informationen	11.11.2024 23:07:47	FilterManager	6	Keine
Informationen	11.11.2024 23:07:47	FilterManager	6	Keine
Informationen	11.11.2024 23:07:47	Ntfs (Microsoft-Windows-Ntfs)	98	Keine
Informationen	11.11.2024 23:07:46	EnhancedStorage-EhStorTcgDrv	100	Driver
Informationen	11.11.2024 23:07:46	EnhancedStorage-EhStorTcgDrv	12	Driver
Informationen	11.11.2024 23:07:46	EnhancedStorage-EhStorTcgDrv	100	Driver
Informationen	11.11.2024 23:07:46	FilterManager	6	Keine
Informationen	11.11.2024 23:07:46	FilterManager	6	Keine
Informationen	11.11.2024 23:07:46	FilterManager	6	Keine
Informationen	11.11.2024 23:07:51	EventLog	6013	Keine
Informationen	11.11.2024 23:07:51	EventLog	6005	Keine
Informationen	11.11.2024 23:07:51	EventLog	6009	Keine
Fehler	11.11.2024 23:07:51	EventLog	6008	Keine
Informationen	11.11.2024 23:07:45	HAL	16	Keine
Informationen	11.11.2024 23:07:45	Kernel-General	20	(6)
Informationen	11.11.2024 23:07:45	Kernel-Boot	30	(21)
Informationen	11.11.2024 23:07:45	Kernel-Boot	27	(33)
Informationen	11.11.2024 23:07:45	Kernel-Boot	25	(32)
Informationen	11.11.2024 23:07:45	Kernel-Boot	238	(101)
Informationen	11.11.2024 23:07:45	Kernel-Boot	247	(99)
Informationen	11.11.2024 23:07:45	Kernel-Boot	20	(31)
Informationen	11.11.2024 23:07:45	Kernel-Boot	32	(58)
Informationen	11.11.2024 23:07:45	Kernel-Boot	18	(57)
Informationen	11.11.2024 23:07:45	Kernel-Boot	153	(62)
Informationen	11.11.2024 23:07:45	Kernel-General	25	(12)
Informationen	11.11.2024 23:07:45	Kernel-General	12	(1)
Fehler	11.11.2024 23:07:14	nvlddmkm	153	Keine
Fehler	11.11.2024 23:07:14	nvlddmkm	153	Keine
Fehler	11.11.2024 23:07:14	nvlddmkm	153	Keine
Fehler	11.11.2024 23:07:11	nvlddmkm	153	Keine
Fehler	11.11.2024 23:07:11	nvlddmkm	153	Keine
Fehler	11.11.2024 23:07:07	nvlddmkm	153	Keine
Fehler	11.11.2024 23:07:07	nvlddmkm	153	Keine

Ereignis 172, Kernel-Power

Allgemein Details

System Anzahl von Ereignissen: 5.518 (!) Neue Ereignisse sind verfügbar

Ebene	Datum und Uhrzeit	Quelle	Ereignis-ID	Aufgabenkategorie
Fehler	11.11.2024 23:05:53	nvlddmkm	153	Keine
Fehler	11.11.2024 23:05:53	nvlddmkm	153	Keine
Fehler	11.11.2024 23:05:53	nvlddmkm	153	Keine
Fehler	11.11.2024 23:05:53	nvlddmkm	153	Keine
Fehler	11.11.2024 23:05:53	nvlddmkm	153	Keine
Fehler	11.11.2024 23:05:53	nvlddmkm	153	Keine
Fehler	11.11.2024 23:05:53	nvlddmkm	153	Keine
Fehler	11.11.2024 23:05:53	nvlddmkm	153	Keine
Fehler	11.11.2024 23:05:53	nvlddmkm	153	Keine
Fehler	11.11.2024 23:05:53	nvlddmkm	153	Keine
Fehler	11.11.2024 23:05:53	nvlddmkm	153	Keine
Fehler	11.11.2024 23:05:53	nvlddmkm	153	Keine
Fehler	11.11.2024 23:05:53	nvlddmkm	153	Keine
Fehler	11.11.2024 23:05:53	nvlddmkm	153	Keine
Fehler	11.11.2024 23:05:53	nvlddmkm	153	Keine
Fehler	11.11.2024 23:05:53	nvlddmkm	14	Keine
Warnung	11.11.2024 18:40:09	DistributedCOM	10016	Keine
Fehler	11.11.2024 18:00:01	TPM-WMI	1796	Keine
Informationen	11.11.2024 17:35:24	Service Control Manager	7040	Keine
Informationen	11.11.2024 17:25:19	Service Control Manager	7040	Keine
Warnung	11.11.2024 16:49:06	DNS Client Events	1014	(1014)
Informationen	11.11.2024 16:32:56	WindowsUpdateClient	19	Windows Update-Agent
Informationen	11.11.2024 16:32:56	Service Control Manager	7045	Keine
Informationen	11.11.2024 16:32:52	WindowsUpdateClient	43	Windows Update-Agent
Informationen	11.11.2024 16:32:52	WindowsUpdateClient	44	Windows Update-Agent
Fehler	11.11.2024 16:25:24	TPM-WMI	1796	Keine
Informationen	11.11.2024 16:24:53	Service Control Manager	7045	Keine
Warnung	11.11.2024 16:24:26	DistributedCOM	10016	Keine
Fehler	11.11.2024 16:24:18	TPM-WMI	1796	Keine
Warnung	11.11.2024 16:22:31	DistributedCOM	10016	Keine
Informationen	11.11.2024 16:22:28	TPM-WMI	1025	Keine
Informationen	11.11.2024 16:22:27	TPM-WMI	1282	Keine
Informationen	11.11.2024 16:22:23	TPM	18	Keine
Informationen	11.11.2024 16:22:23	Service Control Manager	7026	Keine
Warnung	11.11.2024 16:22:22	DistributedCOM	10016	Keine
Warnung	11.11.2024 16:22:22	DistributedCOM	10016	Keine
Informationen	11.11.2024 16:22:22	Winlogon	7001	(1101)
Informationen	11.11.2024 16:22:18	TPM-WMI	1038	Keine
Informationen	11.11.2024 16:22:18	TPM-WMI	1041	Keine
Informationen	11.11.2024 16:22:18	HttpService	113	HTTP Configuration Property Trace Task
Informationen	11.11.2024 16:22:18	HttpService	111	HTTP Configuration Property Trace Task
Informationen	11.11.2024 16:22:18	HttpService	113	HTTP Configuration Property Trace Task

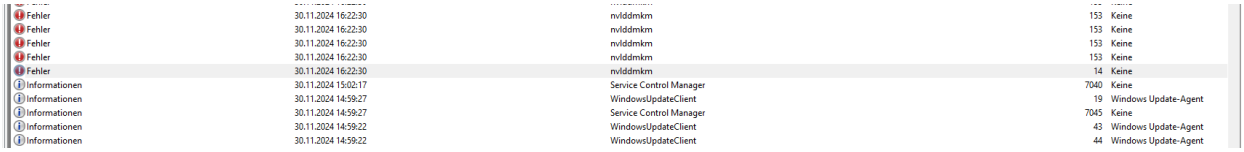
I took these screenshots from the Windows Event viewer shortly after Crash

Event ID 14 (usually related to "nvlddmkm," the NVIDIA graphics driver): This often indicates an issue with communication between the GPU and its driver. Possible causes include driver errors, GPU overload, or compatibility issues.
Event ID 153 (typically linked to disk access): This is a warning that Windows has detected delays in accessing storage media, usually caused by faulty or delayed read/write operations. Common causes include an unstable drive, driver problems, or high system load.

The CPU had to take over more tasks related to graphics processing, which might have led to an increased load.

Other people had similar problems:
Users report stuttering and lag, particularly when loading large textures or shaders in games, which occur more frequently with the i9-13900 K and powerful GPUs such as the NVIDIA RTX 30xx series.

I got this crash some time later AGAIN



Fehler	30.11.2024 16:22:30	nvlddmkm	153	Keine
Fehler	30.11.2024 16:22:30	nvlddmkm	153	Keine
Fehler	30.11.2024 16:22:30	nvlddmkm	153	Keine
Fehler	30.11.2024 16:22:30	nvlddmkm	153	Keine
Fehler	30.11.2024 16:22:30	nvlddmkm	14	Keine
Informationen	30.11.2024 15:02:17	Service Control Manager	7040	Keine
Informationen	30.11.2024 14:59:27	WindowsUpdateClient	19	Windows Update-Agent
Informationen	30.11.2024 14:59:27	Service Control Manager	7045	Keine
Informationen	30.11.2024 14:59:22	WindowsUpdateClient	43	Windows Update-Agent
Informationen	30.11.2024 14:59:22	WindowsUpdateClient	44	Windows Update-Agent

And i took a look at the dump files

```
VIDEO_ENGINE_TIMEOUT_DETECTED (141)
One of the display engines failed to respond in timely fashion.
(This code can never be used for a real BugCheck; it is used to identify live dumps.)
Arguments:
Arg1: ffffe6835b9e0010, Optional pointer to internal TDR recovery context (TDR_RECOVERY_CONTEXT).
Arg2: fffff8072f9d06a0, The pointer into responsible device driver module (e.g. owner tag).
Arg3: 0000000000000000, The secondary driver specific bucketing key.
Arg4: ffffe6835692d0c0, Optional internal context dependent data.
```

Conclusion

The SSD or its interface is most likely affected. Event ID 153 indicates access issues, which often indicates an unstable SSD or controller issues. (i tried multiple SSDs, same problem)
But if we consider that this error only occurs when you disable hardware accelerated gpu scheduling this would indicate that the CPU load distribution plays a role here, rather than the SSD itself.
And don’t forget about the stutters while playing & the other User reports.
But I got a new CPU and I had the same problem, so idk.