

# The Forever Winter

## Microsoft Windows Performance Optimization Guide

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**Guide Version 1.0**

**Patch Version 0.1.37481.0**  
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Hello, my name "Mehlstaub the Cat" (Flour dust the cat)  
I am a German enthusiast for computer hardware and software tuning.

With this guide, I want to support the community so that every player gets their PC set up for this game in the best possible way.  
All settings are free to use, all the software is freeware and all the points I have done a thousand times!

***Use at your own risk!***

***From now on, I will always expand the guide and adapt it to new game patch versions.  
Have fun!  
Cheers***

***Note, skip 1-20 if you want only the best graphics settings (21)***

### **Summary:**

- 1. Maybe consider to do a Bios update!**
- 2. Activate in your mainboard Bios XMP, EXPO or D.O.C.P.!**
- 3. Activate resize bar / re sizable BAR in Bios!**
- 4. Get your drivers up to date!**
- 5. Get your Windows Updates done!**
- 6. Don't start up to many programs at windows start up!**
- 7. Use the windows build in disk cleanup!**
- 8. How to disable indexing in windows Win 10 & 11!**
- 9. How to enable the ultimate performance power plan for Win 10 and 11!**
- 10. Look if some Windows files are corrupted, windows will auto repair they!**
- 11. Use the build in windows game mode!**
- 12. Deactivate the full-screen optimization!**
- 13. Disable Memory Compression**
- 14. Disable memory integrity! For Win 11 users only!**
- 15. Reduce your mouse and keyboard input delay!**
- 16. Use the program TCP Optimizer!**
- 17. NVIDIA graphics card users, this is for you!**
- 18. AMD Radeon graphics card users, this is for you!**
- 19. How can you check if your system is working properly?**
- 20. I have tested the graphics game settings and this are the results**
- 21. The best "The Forever Winter" graphics setting for everyone!**

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## **1. Maybe consider to do a Bios update!**

Many newer BIOS versions give more performance because bugs have been fixed and compatibility has mostly been improved for memory.

I recommend this only for experienced users!

If you have never updated a BIOS before, please don't do it if you are unsure.

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## **2. Activate in your mainboard Bios XMP, EXPO or D.O.C.P.!**

These are Memory Profile for your RAM.

It may sounds diff rend on your mainboard vendor, you have to look for yourself in goggle. You lose a ton of performance if this profile is not activated.

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## **3. Activate resize bar / re sizable BAR in Bios!**

You can look if it's still activated with the program GPU-Z > Advanced > PCIe Re sizable Bar There must be enabled an all others a Yes. Ask goggle for more information's.

<https://www.techpowerup.com/gpuz/>

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## **4. Get your drivers up to date!**

Update your graphics drivers and don't forget your chipset drivers too. Don't use GeForce Experience to optimize your graphics setting!

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## **5. Get your Windows Updates done!**

Start > settings > update and safety > look for updates  
See if you're up to date, if not, well go on an install them.

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## **6. Don't start up to many programs at windows start up!**

Only programs to use immediately after the windows start shut be in to autostart. All other programs like game launchers or other stuff shut be disabled at start. Open *System Configuration Utility* in windows, and look at the programs you can deactivate on start up. Goggle is your friend if you don't find it!

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## 7. Use the windows build in disk cleanup!

Search > Disk cleanup > open administrator  
Check all the boxes and get rid of old and unused file stuff.

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## 8. How to disable indexing in windows Win 10 & 11!

*This website explains it all:*

[https://www.majorgeeks.com/content/page/disable\\_indexing\\_11.html](https://www.majorgeeks.com/content/page/disable_indexing_11.html)

## 9. How to enable the ultimate performance power plan for!

*This website explains it all:*

<https://www.howtogeek.com/368781/how-to-enable-ultimate-performance-power-plan-in-windows-10/>

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## 10. Look if some Windows files are corrupted, windows will auto repair they!

Open "cmd" as an administrator  
Type in **sfc /scannow** pres enter and let it run  
At the end, there will be a message if the program has found some files to repair.

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## 11. Use the build in windows game mode!

Start > settings > gaming > game mode

look for your desktop app

Steam/steamapps\common\  
The Forever Winter\Windows\ForeverWinter\Binaries\Win64\  
ForeverWinter-Win64-Shipping.exe

Click on > options > high performance and save it.

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## 12. Deactivate the full-screen optimization!

Look in the folder I linked above for the same EXE file.

Right-click on the EXE file > attribute > compatibility > click change settings for all users > check the box here for disable full screen enable.

Optional go to change high DPI- settings > check the box to

Set behavior at high dpi scaling overwritten to application

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## 13. Disable Memory Compression

*This website explains it all:*

<https://www.makeuseof.com/windows-memory-compression-guide/>

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## 14. Disable memory integrity! For Win 11 users only!

*This website explains it all:*

<https://www.elevenforum.com/t/enable-or-disable-core-isolation-memory-integrity-in-windows-11.4942/>

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## 15. Reduce your mouse and keyboard input delay!

Please watch this video:

<https://www.youtube.com/watch?v=FkVQm-hyL28>

And here are some file to download:

[https://www.mediafire.com/file/yoq0wjbbcfkplsr/Data\\_Queue\\_Sizes.rar/file](https://www.mediafire.com/file/yoq0wjbbcfkplsr/Data_Queue_Sizes.rar/file)

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## 16. Use the program TCP Optimizer!

This program optimizes your network connection it can lower the ping and you can get more bandwidth this all in under 5 min of time, total easy, and it's safe to use.

Download:

<https://www.techspot.com/downloads/1702-tcp-optimizer.html>

For more information's please watch some you tube videos.

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## 17. NVIDIA graphics card users, this is for you!

Disable HDCP for NVIDIA cards!

*This website explains it all:*

<https://forums.guru3d.com/threads/disable-hdcp-regedit.442563/>

- Don't use Fast Sync at the moment, the frame times are not stable enough and Fast Sync will make it even worse.
  - I recommend disable v sync in the driver!
  - Check if gsync is enabled
- 

## 18. AMD Radeon graphics card users, this is for you!

Use the driver intern Radeon Super Resolution (RSR) feature Activate and lower the resolution in game this is an FSR 1 up scaler works fine for this game.

Don't use Radeon Enhanced Sync at the moment, I tested it, the frame times all over the place and even more with Radeon Enhanced Sync activated at the moment.

- Activate Radeon Anti-Lag
- I recommend disable v sync in the driver!
- Check if AMD freesync is enabled

### ***Disable HDCP:***

Go into the Radoen Adrenaline Software > display > overrides > disable > start new

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## 19. How can you check if your system is working properly?

This can be done, for example, with the 3DMark.

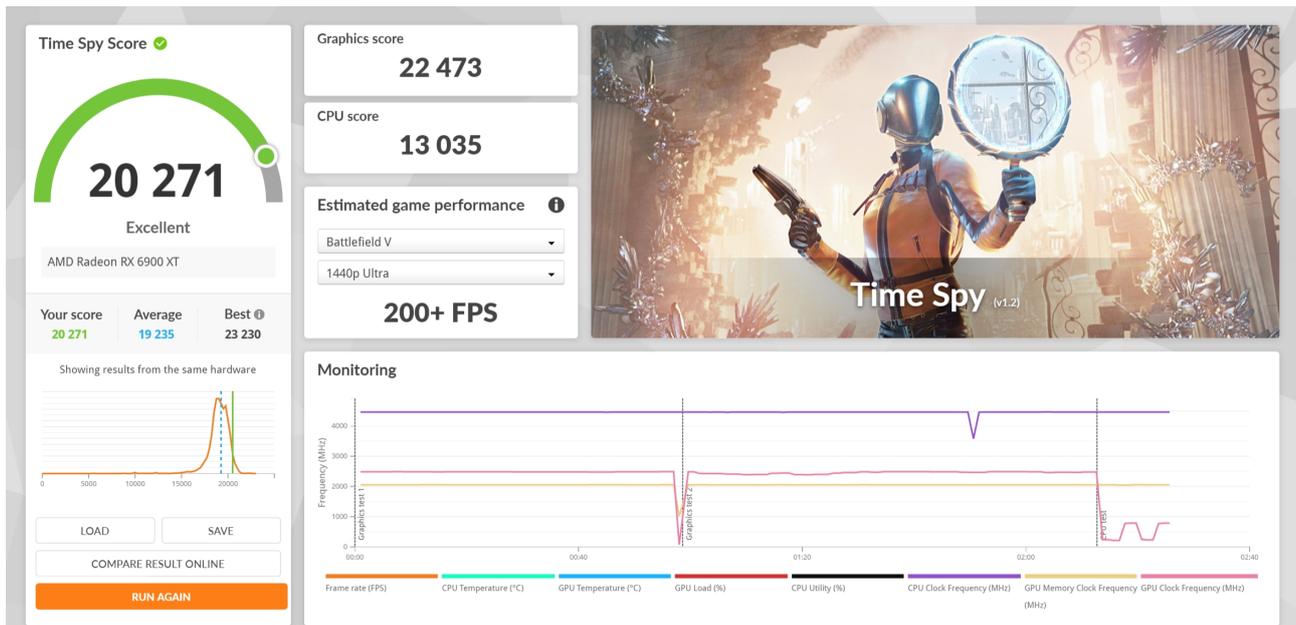
*There is a free version of it, you don't have to buy it!*

<https://benchmarks.ul.com/3dmark>

When you have installed it, you can run the Time Spy benchmark. After the run you can see the result like in this screenshot from my system below.

The orange line are all results in the 3Dmark database with the same CPU and GPU as in your system. The green dashed line shows the average of all data, in my case, 19235 points. My system, has 20271 points, so the result is more than average. If you are below the green dashed line, your system performances under the average.

*Your system should be around average, then you're fine.*



## 20. I have tested the graphics game settings and this are the results

All test are made with a 5800X3D and a 6900XT.

Just for testing, I used the 1920×1080 resolution to see better the differences between the individual settings.

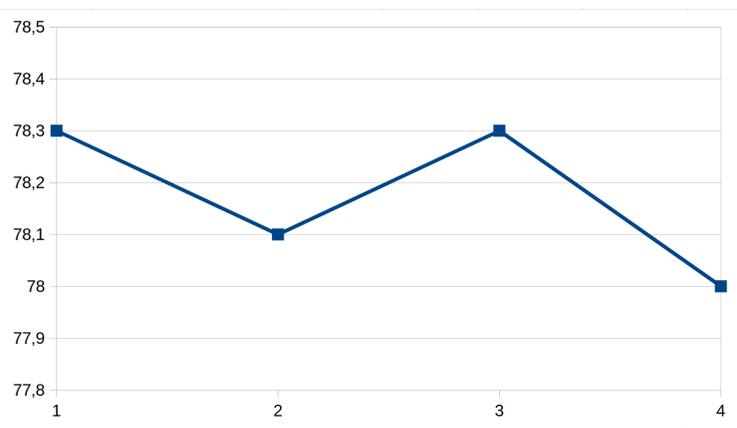
The conclusion of this all is point 21!

### Shading Quality:

I don't know what this setting exactly does, but it seems not working correctly, I also can see no visual difference.

### I recommend low setting

Resolution	1920x1080	1920x1080	1920x1080	1920x1080
Shading Quality	Low	Medium	High	Ultra
Window Mode	Fullscreen	Fullscreen	Fullscreen	Fullscreen
Dynamic Resolution	On	On	On	On
Resolution Scale	100,00 %	100,00 %	100,00 %	100,00 %
Vertical Sync	Off	Off	Off	Off
Framerate Limit	120	120	120	120
AntiAlasing Quality	Low	Low	Low	Low
Foliage Quality	Low	Low	Low	Low
Texture Quality	Low	Low	Low	Low
Shadow Quality	Low	Low	Low	Low
Reflection Quality	Low	Low	Low	Low
PostProcess Quality	Low	Low	Low	Low
Particle Quality	Low	Low	Low	Low
ViewDistance Quality	Low	Low	Low	Low
Global lumiation Quality	Low	Low	Low	Low
Motion Blur	Off	Off	Off	Off
FPS avg.	78,3	78,1	78,3	78
Testtime	5min	1min	1min	1min
	1	2	3	4

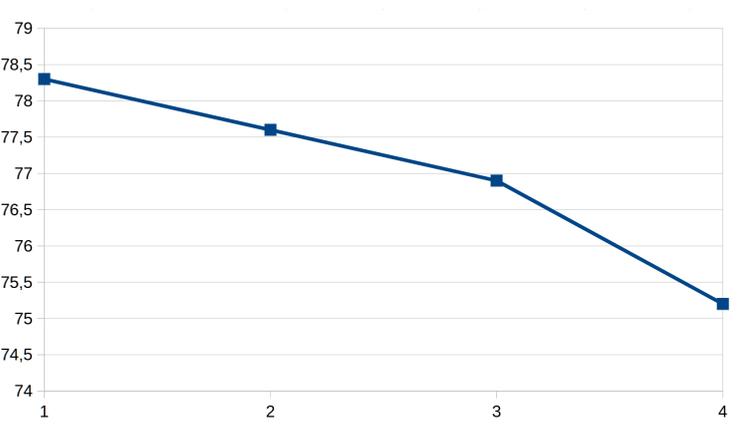


### Anti Alasing Quality:

I recommend this settings:

1920×1080 (FullHD) > High  
 2560×1440 (WQHD) > Medium  
 3440×1440 (UWQHD) > Medium  
 3560×2160 (UHD) > Low

Resolution	1920x1080	1920x1080	1920x1080	1920x1080
Shading Quality	Low	Low	Low	Low
Window Mode	Fullscreen	Fullscreen	Fullscreen	Fullscreen
Dynamic Resolution	On	On	On	On
Resolution Scale	100,00 %	100,00 %	100,00 %	100,00 %
Vertical Sync	Off	Off	Off	Off
Framerate Limit	120	120	120	120
AntiAlasing Quality	Low	Medium	High	Ultra
Foliage Quality	Low	Low	Low	Low
Texture Quality	Low	Low	Low	Low
Shadow Quality	Low	Low	Low	Low
Reflection Quality	Low	Low	Low	Low
PostProcess Quality	Low	Low	Low	Low
Particle Quality	Low	Low	Low	Low
ViewDistance Quality	Low	Low	Low	Low
Global lumiation Quality	Low	Low	Low	Low
Motion Blur	Off	Off	Off	Off
FPS avg.	78,3	77,6	76,9	75,2
Testtime	5min	1min	5min	5min
	1	2	3	4

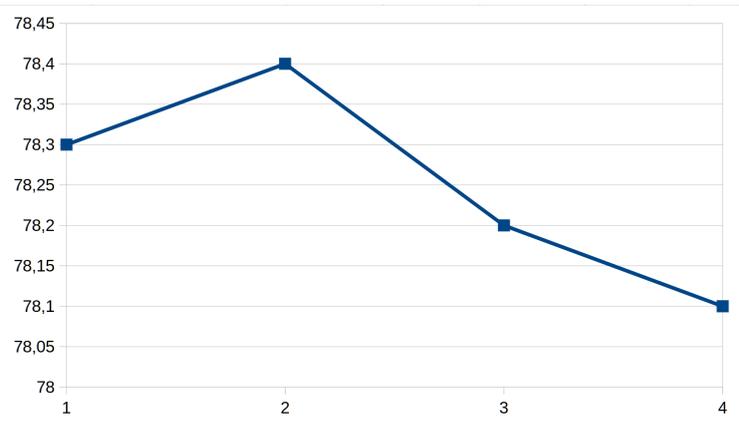


## Foliage Quality:

Another setting I don't find any difference.  
All measurements within a margin of error.

## I recommend low setting

Resolution	1920x1080	1920x1080	1920x1080	1920x1080
Shading Quality	Low	Low	Low	Low
Window Mode	Fullscreen	Fullscreen	Fullscreen	Fullscreen
Dynamic Resolution	On	On	On	On
Resolution Scale	100,00 %	100,00 %	100,00 %	100,00 %
Vertical Sync	Off	Off	Off	Off
Framerate Limit	120	120	120	120
AntiAliasing Quality	Low	Low	Low	Low
Foliage Quality	Low	Medium	High	Ultra
Texture Quality	Low	Low	Low	Low
Shadow Quality	Low	Low	Low	Low
Reflection Quality	Low	Low	Low	Low
PostProcess Quality	Low	Low	Low	Low
Particle Quality	Low	Low	Low	Low
ViewDistance Quality	Low	Low	Low	Low
Global Illumination Quality	Low	Low	Low	Low
Motion Blur	Off	Off	Off	Off
FPS avg.	78,3	78,4	78,2	78,1
Testtime	5min	1min	1min	1min
	1	2	3	4



## Texture Quality:

Now, this is interesting!

Texture Quality has absolute zero performance hit.  
All measurements within a margin of error.

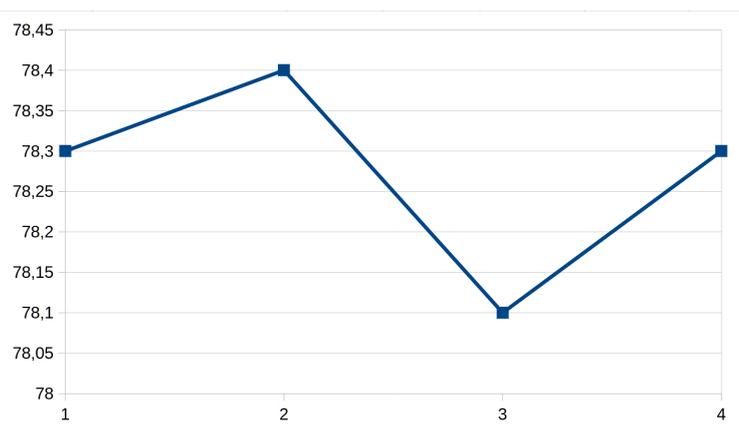
But I can see on the 6900XT at low, medium, high and ultra  
all settings do have exactly the same VRAM usage.  
It consumes the full 16 GB all the time I don't know if that should be the case!

For now, I will stick to this settings like this:

Graphics card with 8GB VRAM > medium  
Graphics card with 10, 11, 12GB VRAM > high  
Graphics card with 16GB+ VRAM > ultra

I think that these settings could be realistic, but test it for your self.

Resolution	1920x1080	1920x1080	1920x1080	1920x1080
Shading Quality	Low	Low	Low	Low
Window Mode	Fullscreen	Fullscreen	Fullscreen	Fullscreen
Dynamic Resolution	On	On	On	On
Resolution Scale	100,00 %	100,00 %	100,00 %	100,00 %
Vertical Sync	Off	Off	Off	Off
Framerate Limit	120	120	120	120
AntiAliasing Quality	Low	Low	Low	Low
Foliage Quality	Low	Low	Low	Low
Texture Quality	Low	Medium	High	Ultra
Shadow Quality	Low	Low	Low	Low
Reflection Quality	Low	Low	Low	Low
PostProcess Quality	Low	Low	Low	Low
Particle Quality	Low	Low	Low	Low
ViewDistance Quality	Low	Low	Low	Low
Global Illumination Quality	Low	Low	Low	Low
Motion Blur	Off	Off	Off	Off
FPS avg.	78,3	78,4	78,1	78,3
Testtime	5min	1min	1min	1min
	1	2	3	4

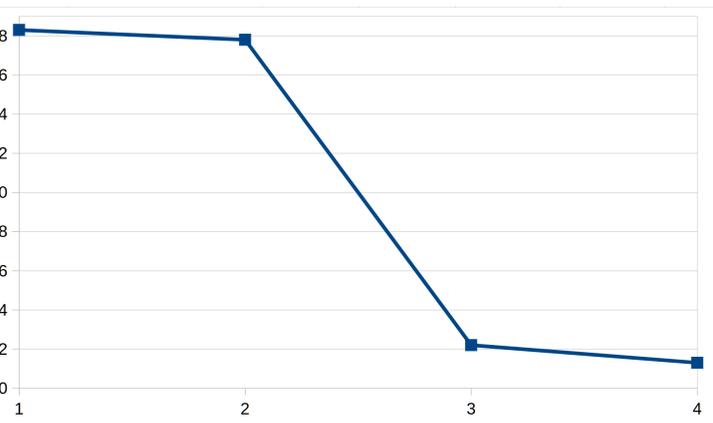


## Shadow Quality:

Now here we are the first setting with a big performance hit at high and ultra settings. The visual difference is not worth this big hit.

I recommend medium setting

Resolution	1920x1080	1920x1080	1920x1080	1920x1080
Shading Quality	Low	Low	Low	Low
Window Mode	Fullscreen	Fullscreen	Fullscreen	Fullscreen
Dynamic Resolution	On	On	On	On
Resolution Scale	100,00 %	100,00 %	100,00 %	100,00 %
Vertical Sync	Off	Off	Off	Off
Framerate Limit	120	120	120	120
AntiAlasing Quality	Low	Low	Low	Low
Foliage Quality	Low	Low	Low	Low
Texture Quality	Low	Low	Low	Low
Shadow Quality	Low	Medium	High	Ultra
Reflection Quality	Low	Low	Low	Low
PostProcess Quality	Low	Low	Low	Low
Particle Quality	Low	Low	Low	Low
ViewDistance Quality	Low	Low	Low	Low
Global lumiation Quality	Low	Low	Low	Low
Motion Blur	Off	Off	Off	Off
FPS avg.	78,3	77,8	62,2	61,3
Testtime	5min	1min	5min	5min
	1	2	3	4

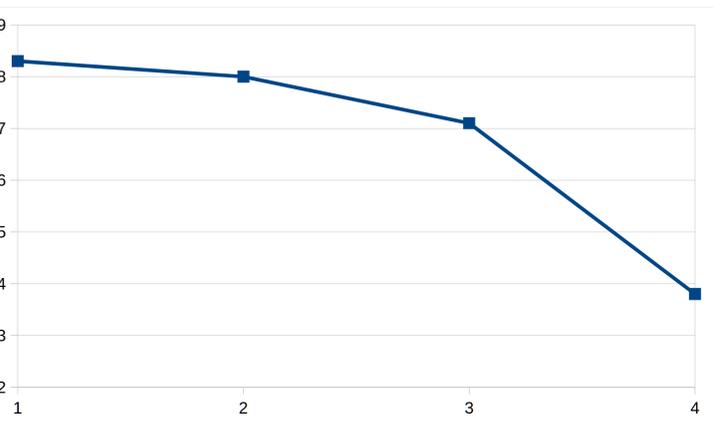


## Reflection Quality:

The visual difference were small.

I recommend medium setting

Resolution	1920x1080	1920x1080	1920x1080	1920x1080
Shading Quality	Low	Low	Low	Low
Window Mode	Fullscreen	Fullscreen	Fullscreen	Fullscreen
Dynamic Resolution	On	On	On	On
Resolution Scale	100,00 %	100,00 %	100,00 %	100,00 %
Vertical Sync	Off	Off	Off	Off
Framerate Limit	120	120	120	120
AntiAlasing Quality	Low	Low	Low	Low
Foliage Quality	Low	Low	Low	Low
Texture Quality	Low	Low	Low	Low
Shadow Quality	Low	Low	Low	Low
Reflection Quality	Low	Medium	High	Ultra
PostProcess Quality	Low	Low	Low	Low
Particle Quality	Low	Low	Low	Low
ViewDistance Quality	Low	Low	Low	Low
Global lumiation Quality	Low	Low	Low	Low
Motion Blur	Off	Off	Off	Off
FPS avg.	78,3	78	77,1	73,8
Testtime	5min	1min	5min	5min
	1	2	3	4

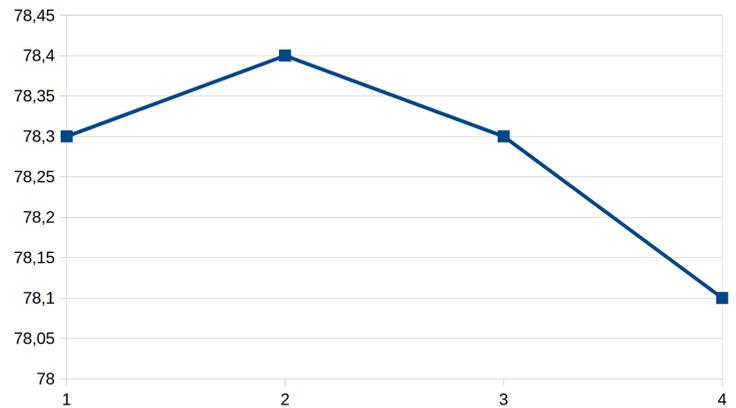


## Post Process Quality:

In this setting, I also can't find any difference.  
All measurements within a margin of error.

### I recommend low setting

Resolution	1920x1080	1920x1080	1920x1080	1920x1080
Shading Quality	Low	Low	Low	Low
Window Mode	Fullscreen	Fullscreen	Fullscreen	Fullscreen
Dynamic Resolution	On	On	On	On
Resolution Scale	100,00 %	100,00 %	100,00 %	100,00 %
Vertical Sync	Off	Off	Off	Off
Framerate Limit	120	120	120	120
AntiAlasing Quality	Low	Low	Low	Low
Foliage Quality	Low	Low	Low	Low
Texture Quality	Low	Low	Low	Low
Shadow Quality	Low	Low	Low	Low
Reflection Quality	Low	Low	Low	Low
PostProcess Quality	Low	Medium	High	Ultra
Particle Quality	Low	Low	Low	Low
ViewDistance Quality	Low	Low	Low	Low
Global lumiation Quality	Low	Low	Low	Low
Motion Blur	Off	Off	Off	Off
FPS avg.	78,3	78,4	78,3	78,1
Testtime	5min	1min	1min	1min
	1	2	3	4

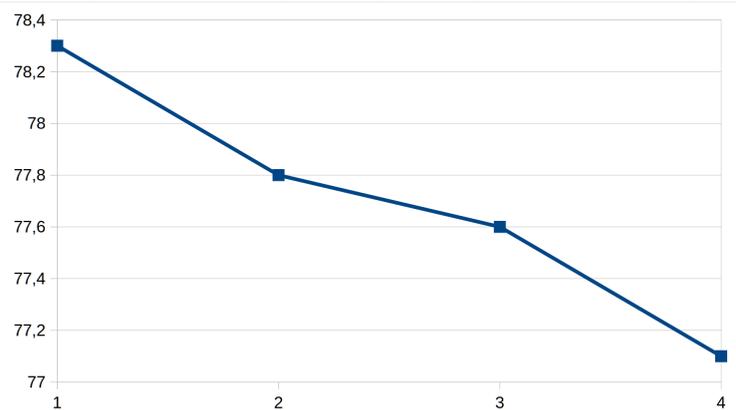


## Particle Quality:

The visual difference were small.  
All measurements within a margin of error.

### I recommend low setting

Resolution	1920x1080	1920x1080	1920x1080	1920x1080
Shading Quality	Low	Low	Low	Low
Window Mode	Fullscreen	Fullscreen	Fullscreen	Fullscreen
Dynamic Resolution	On	On	On	On
Resolution Scale	100,00 %	100,00 %	100,00 %	100,00 %
Vertical Sync	Off	Off	Off	Off
Framerate Limit	120	120	120	120
AntiAlasing Quality	Low	Low	Low	Low
Foliage Quality	Low	Low	Low	Low
Texture Quality	Low	Low	Low	Low
Shadow Quality	Low	Low	Low	Low
Reflection Quality	Low	Low	Low	Low
PostProcess Quality	Low	Low	Low	Low
Particle Quality	Low	Medium	High	Ultra
ViewDistance Quality	Low	Low	Low	Low
Global lumiation Quality	Low	Low	Low	Low
Motion Blur	Off	Off	Off	Off
FPS avg.	78,3	77,8	77,6	77,1
Testtime	5min	1min	1min	5min
	1	2	3	4

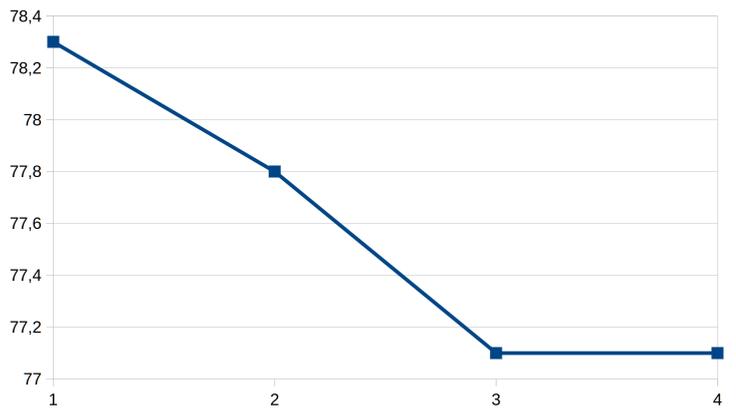


## View Distance Quality:

I don't know exactly why high and ultra have the same FPS!  
 I have done some screenshots and I can't see any difference between high and ultra.  
 The difference to medium is also very small.

## I recommend medium setting

Resolution	1920x1080	1920x1080	1920x1080	1920x1080
Shading Quality	Low	Low	Low	Low
Window Mode	Fullscreen	Fullscreen	Fullscreen	Fullscreen
Dynamic Resolution	On	On	On	On
Resolution Scale	100,00 %	100,00 %	100,00 %	100,00 %
Vertical Sync	Off	Off	Off	Off
Framerate Limit	120	120	120	120
AntiAlasing Quality	Low	Low	Low	Low
Foliage Quality	Low	Low	Low	Low
Texture Quality	Low	Low	Low	Low
Shadow Quality	Low	Low	Low	Low
Reflection Quality	Low	Low	Low	Low
PostProcess Quality	Low	Low	Low	Low
Particle Quality	Low	Low	Low	Low
ViewDistance Quality	Low	Medium	High	Ultra
Global lumiation Quality	Low	Low	Low	Low
Motion Blur	Off	Off	Off	Off
FPS avg.	78,3	77,8	77,1	77,1
Testtime	5min	1min	5min	5min
	1	2	3	4

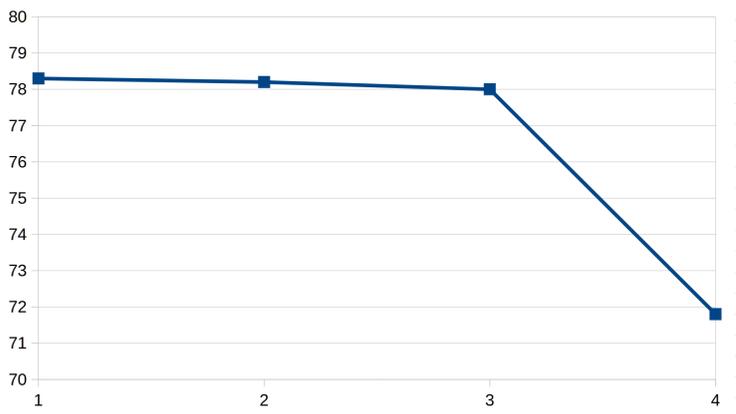


## Global Illumination:

Big performance hit for the ultra setting.

## I recommend high setting

Resolution	1920x1080	1920x1080	1920x1080	1920x1080
Shading Quality	Low	Low	Low	Low
Window Mode	Fullscreen	Fullscreen	Fullscreen	Fullscreen
Dynamic Resolution	On	On	On	On
Resolution Scale	100,00 %	100,00 %	100,00 %	100,00 %
Vertical Sync	Off	Off	Off	Off
Framerate Limit	120	120	120	120
AntiAlasing Quality	Low	Low	Low	Low
Foliage Quality	Low	Low	Low	Low
Texture Quality	Low	Low	Low	Low
Shadow Quality	Low	Low	Low	Low
Reflection Quality	Low	Low	Low	Low
PostProcess Quality	Low	Low	Low	Low
Particle Quality	Low	Low	Low	Low
ViewDistance Quality	Low	Low	Low	Low
Global lumiation Quality	Low	Medium	High	Ultra
Motion Blur	Off	Off	Off	Off
FPS avg.	78,3	78,2	78	71,8
Testtime	5min	1min	5min	5min
	1	2	3	4



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## 21. The best “The Forever Winter” graphics setting for everyone!

### 1. Overall Quality

Set to **Custom**

### 2. Resolution

Set your resolution to the maximum monitor resolution

### 3. Shading Quality

Set to **Low**

### 4. Window Mode

Set window mode to **full screen**

This is the best way to go.

### 5. Dynamic Resolution

Set to **On**

### 6. Vsync

Set to **Off**

Very important!

### 7. Frame Rate Limit

Set to your **maximal monitor refresh rate**

### 8. Anti Alasing Quality

1920×1080 (FullHD)	> High
2560×1440 (WQHD)	> Medium
3440×1440 (UWQHD)	> Medium
3560×2160 (UHD)	> Low

### 9. Foliage Quality

Set to **Low**

### 10. Texture Quality

Graphics card with 8GB VRAM	> Medium
Graphics card with 10, 11, 12GB VRAM	> High
Graphics card with 16GB+ VRAM	> Ultra

## **11. Shadow Quality**

Set to **Medium**

## **12. Reflection Quality**

Set to **Medium**

## **13. Post Process Quality**

Set to **Low**

## **14. Particle Quality**

Set to **Low**

## **15. View Distance Quality**

Set to **Medium**

## **16. Global Illumination**

Set to **High**

## **17. Motion Blur**

Set to **Off**

## **18. Resolution Scale**

Set this **slider to your framerate likings**

Lower the slider to the left side, the game will rendered in a lower resolution, so your framerate will go up.

Set the Slider to the right side the game will rendered in a higher resolution, the framerate will go down.

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**If you are here right now, you are finished the guide.  
I hope it runs all well and without any problems.**

**Have fun to play the game!**

**Cheers**