



AMD Survival Guide

By Hans Fischer. Icon by Reddit user "darkventus" 07/2019.

The first step is to configure the Windows operating system for maximum performance, but you may skip to page 2 if you wish to only configure your Radeon settings.

Configuring Windows

As of 07/11/2019 (and no later), the following should apply to Windows 7 and later.

1. Log into Windows with an administrative account. This is good practice when playing games for Windows XP or older, because older games were designed to run with administrative privileges.
2. Open the Control Panel.
3. If "View by: Category" is selected, then go to "System and Security" > "System" > "Advanced system settings." If "View by: Large icons" or "View by: Small icons" is selected, then go to "System" > "Advanced system settings."
4. With the "Advanced" tab selected on the "System Properties" window, click the "Settings..." button for the "Performance" section.
5. On the "Performance Options" window, select the option to "Adjust for best performance." Click "Apply," then click "OK" to close the window.
6. Click "OK" on the "System Properties" Window to close it.
7. Return to the beginning of the Control Panel.
8. If "View by: Category" is selected, then go to "Hardware and Sound" > "Power Options." If "View by: Large icons" or "View by: Small icons" is selected, then go directly to "Power Options."
9. Select the "Ultimate Performance" power plan. If "Ultimate Performance" is not listed, then select "High performance" instead.

By this point, you may safely close the Control Panel.

Users who have installed SPV3 to a hard disk drive should also regularly defragment the drive. Consult official Microsoft sources to learn how.

Configuring Radeon Settings

The following will configure the Adrenalin edition of Radeon Settings, but all Radeon users should mimic as many steps as possible.

1. Never install an optional/beta driver. As of 07/11/2019 (and no later), perform a CLEAN installation of Adrenalin 2019 Edition 19.5.2.
2. Manually add the "haloce.exe" executable from your SPV3 directory to your "Gaming" tab in Radeon Settings. Achieve this by clicking "Add" in the upper right corner and selecting "Browse."

By default, SPV3 installs to "Documents" > "My Games" > "Halo SPV3."

3. Apply the following on your "Gaming" tab to "haloce":

ANTI-ALIASING MODE: USE APPLICATION SETTINGS

The SPV3.2 launcher version 0233 has no option to enable anti-aliasing. Until a future launcher does, do not concern yourself with altering your ANTI-ALIASING METHOD; SPV3 is graphically demanding enough without applying anti-aliasing in the first place.

MORPHOLOGICAL FILTERING: OFF

Morphological filtering removes aliasing by blurring edges. It also blurs the text of the user interface, so leave it off.

ANISOTROPIC FILTERING MODE: USE APPLICATION SETTINGS

You should also disable anisotropic filtering in the SPV3 launcher. It does not function well in SPV3 with Radeon GPUs.

TEXTURE FILTERING QUALITY: PERFORMANCE

SPV3.2 looks gorgeous enough to avoid the higher settings.

SURFACE FORMAT OPTIMIZATION: OFF

This setting forces models to appear more geometric in DirectX 9 games like SPV3. The performance gain is negligible, so disable it.

WAIT FOR VERTICAL REFRESH: OFF, UNLESS APPLICATION SPECIFIES

Waiting for vertical refresh, also known as "vsync," prevents screen tearing. Only enable vsync via the in-game menu if you use a frame limiter like RTSS that reduces input lag.

If you cannot maintain a consistent 60 fps on the more demanding levels, then consider enabling vsync after limiting your framerate to 30 fps via RTSS. SPV3 plays well at framerates of 27 or greater as long as the frametime remains consistent.

<https://www.guru3d.com/files-details/rtss-rivatuner-statistics-server-download.html>

OPENGL TRIPLE BUFFERING: OFF

Only use triple-buffered vsync if you play without a frame limiter. If you limit your framerate with RTSS, then triple-buffered vsync will introduce input lag.

SHADER CACHE: OFF

The shader cache stores compiled shaders on your drive for improved performance. Disable it unless you have GBs worth of space on your drive to spare.

TESSELLATION MODE: OVERRIDE APPLICATION SETTINGS

The default setting of "AMD optimized" may or may not force your tessellation level to 64x for SPV3. As tessellation significantly impacts performance, override the application settings and lower it.

MAXIMUM TESSELLATION LEVEL: OFF

While the OpenSauce extension for SPV3 does reference quad tessellation, nothing in SPV3 actually requires tessellation.

RADEON FREESYNC: OFF

Enabling FreeSync is unnecessary if you play at low framerates or play without an actual FreeSync monitor.

DISPLAY SCALING: OFF

The best way to control display scaling is from your "Display" tab.

FRAME RATE TARGET CONTROL: DISABLED

Frame Rate Target Control adds input lag. Limit your framerate with RTSS if you intend to play with vsync. Alternatively, without vsync, use the in-game console command "chimera_throttle_fps X," where the "X" represents your desired framerate.

4. Apply the following on your "Gaming" tab to "Global Settings":

POWER EFFICIENCY

Elsewhere, AMD users complain that enabling power efficiency causes inconsistent framerates. Compare the smoothness while playing the most demanding levels in SPV3 with power efficiency on and with power efficiency off, then decide for yourself whether or not you wish to enable or disable it.

GPU WORKLOAD: GRAPHICS

The "Compute" setting is for optimizing mining cards, but the only mining to be done in SPV3 is the mining of brains from extraterrestrial skulls.

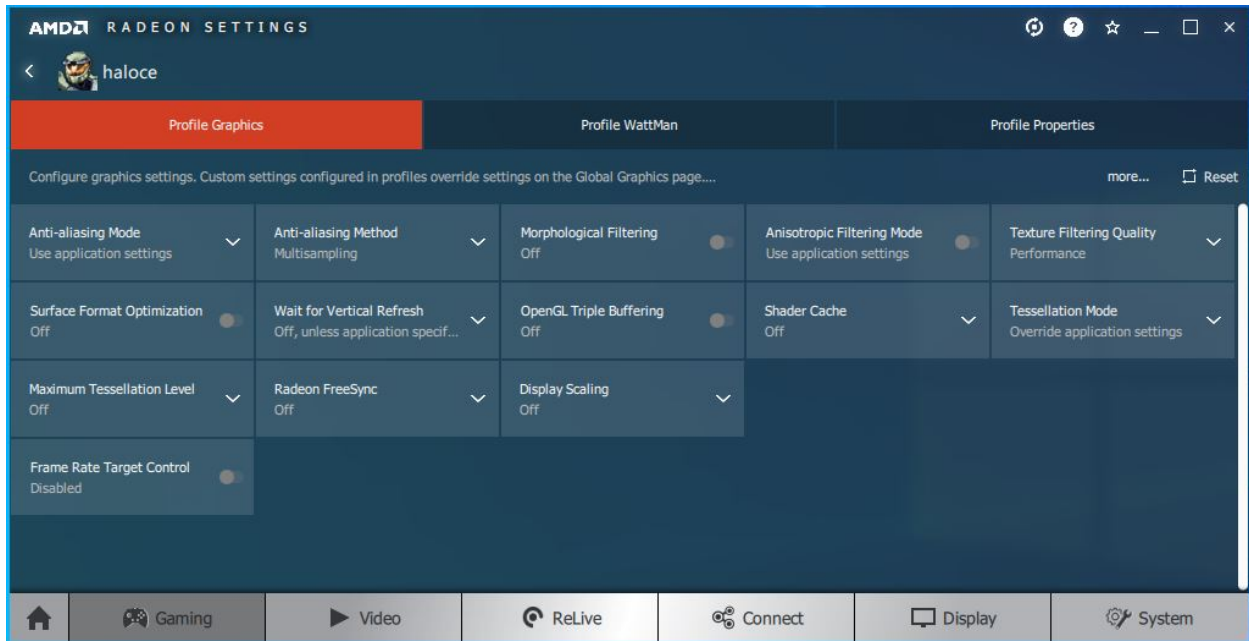
CHILL: OFF

Radeon Chill attempts to keep thermals down by only permitting high framerates during moments of action. For SPV3, Radeon cards have compatibility issues that will force your framerates down when you need them high, anyway.

5. On your "Display" tab, enable "GPU Scaling," then set the Scaling Mode to "Preserve aspect ratio." GPU scaling may slightly lower performance, but it will also allow you to play at an unstretched 4:3 aspect ratio if you need to lower your resolution.

By this point, you may safely close your Radeon Settings window. You may also view the screenshot on the following page to review Hans's personal settings.

You are not done yet, however. Please continue reading.



Hans's Personal Settings

Configuring SPV3

1. Open your "Halo SPV3" installation directory.
2. Right click on "haloce.exe" and go to "Properties" > "Compatibility."
3. Check "Run this program as an administrator."
4. Click "Apply," then "OK."
5. Repeat the above steps for every file with the ".exe" extension in the "Halo SPV3" directory, especially for "spv3.exe."

Congratulations! You may now configure SPV3 via the official launcher and play. Keep your eyes downrange and your finger on your trigger, and you get to go home in one piece.

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