

# RReady Rendition Verite Wrapper

v1.0 September 10, 2023

RRedline is the Windows graphics API of the Rendition Verité graphics cards of the mid-1990s.

This app adds an RRedline rendering subsystem to Windows. The renderer must be selected within the application for this to function (for some apps, others may auto-detect and use it). All 13 RRedline games are supported (both v1.0 and v2.0 of RRedline).

#### INFO

Minimum requirements:

Dual core 3.00 GHz

Intel HD 4000 (Some application may have issues due to outdated drivers on this chipset) 7 MB disk space

Windows 7 SP1 or later

Recommended:

Quad core

Discrete OpenGL 3.3 compatible GPU with GLSL 1.40 compatibility profile support (Most discrete GPUs built after 2012 should be fine)

Windows 7 SP1 or later.

RLauncher and the DLLs will install into a subfolder under your documents folder (%USERPROFILE%\Documents\RReady Rendition Verité Wrapper).

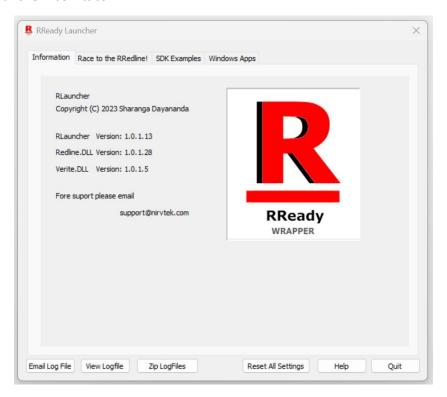
For the latest info on RReady including compatibility look here:

https://www.vogons.org/viewtopic.php?f=9&t=95721

For support email <a href="mailto:support@nirvtek.com">support@nirvtek.com</a> (Hit the "Zip logfiles" button in the launcher and when the Explorer window opens attach the highlighted zip file into your email.

# Usage

### The launcher has 4 tabs:



# Information

This lists version numbers for individual components.

# Race to the Readline!

This lists the "Race to the RRedline!" competition winners from the 1990s. The are not supplied with this app but can be manually downloaded from public servers.

One demo is lost to time: Mirage.exe. If you have a copy and would like to share, email support@nirvtek.com.

The download link for "Race to the RRedline!" Is:

https://nirvtek.com/downloads/RaceToTheRRedline%21%28Full%20Set%29.zip

MD5 Checksum: cd20d1e90eca101d7b7ca85589f8745b

(See Verifying checksums in the next below)

**SDK Examples** 

This tab contains SDK demos that Rendition released to teach developers how to code against RRedline v2.0. The apps are not supplied with RReady, but can be downloaded from public servers and MD5 checksum verified.

The latest download link for the SDK demos is (This includes RRosetta (Rhino)):

https://nirvtek.com/downloads/SDKDemos.v2.zip

MD5 Checksum: 9560e2f82b8f56c831ac7468cc04b899

(Old demos without RRosetta (Rhino))

https://nirvtek.com/downloads/SDKDemos.zip

MD5 checksum: ff93c26cf3c341bfc9d974d9e39f1661

To verify a checksum:

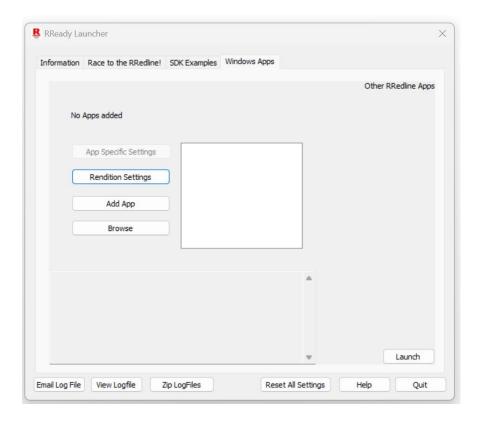
- 1) Click **Start** (to bring up the start menu.
- 2) Type cmd and press [ENTER]
- 3) In the black window which pops up type
- 4) Certutil -hashfile <Filename> md5

(where <Filename> is the full path to the downloaded file.)

### For example:

```
Command Prompt
12-Sep-23 15:26
                          <DIR>
                                               RRedline
                    0 File(s) 0 bytes
3 Dir(s) 79,589,654,528 bytes free
C:\Code\Test>cd RRedline
C:\Code\Test\RRedline>dir
 Volume in drive C has no label.
Volume Serial Number is 647F-948E
 Directory of C:\Code\Test\RRedline
12-Sep-23 15:26
                          <DIR>
.
12-Sep-23 17:16
                   16 ClR> ...
10 9,256,518 RaceToTheRRedline!(Full Set).zip
26 682,478 SDKDemos.zip
2 File(s) 9,938,996 bytes
2 Dir(s) 79,589,588,992 bytes free
 .
12–Sep–23
12-Sep-23 15:26
C:\Code\Test\RRedline>certutil -hashfile "RaceToTheRRedline!(Full Set).zip" md5 MD5 hash of RaceToTheRRedline!(Full Set).zip:
cd20d1e90eca101d7b7ca85589f8745b
CertUtil: -hashfile command completed successfully.
C:\Code\Test\RRedline>certutil -hashfile SDKDemos.zip md5
MD5 hash of SDKDemos.zip:
ff93c26cf3c341bfc9d974d9e39f1661
CertUtil: -hashfile command completed successfully.
C:\Code\Test\RRedline>
```

# Windows Apps



# Adding an App

Click "add app" and using the file location dialog navigate to the application exe. Once an app is added it's EXE file's name will appear in the white section in the middle. Click "Rendition Settings" to configure resolution and other settings (described in a later section.)

### Removing an app

Right click the app name in the list in the middle and select remove.

### Launch an app

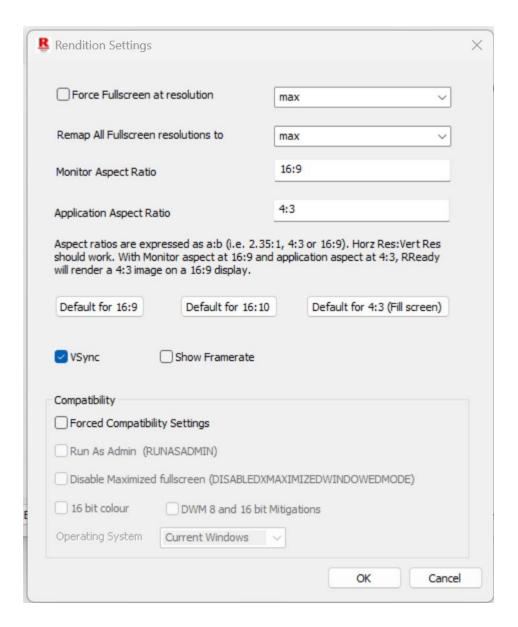
Click on the app name in the list and then click the "Launch" button in the lower right (just above quit.) It's best to configure the app in Rendition Settings (next section) before launching it.

# **Browse**

Should open an explorer window in the selected application's foder. The selected application is the highlighted entry in the white section in the middle.

### Rendition Settings

Click Rendition Settings and the following dialog box will appear:



Apart from one app all the others have no need for "Force Fullscreen at resolution." (that one app must be configured to run in a window in its baseq2/config.cfg file.)

Select the resolution in force fullscreen (if ticked) or "Remap All fullscreen resolutions to:" to one of the listed resolutions. "Max" selects the highest available resolution and "default" whatever the application requests (the refresh rate is capped to the highest available at that resolution). The resolutions listed are from querying the list of available Windows resolutions.

NOTE: Just because a resolution is supported does not mean that an RRedline application will have enough texture memory to run at that resolution. Display corruption and lockups may occur if insufficient video RAM (VRAM) is available.

Aspect ratio is split into 2 parts, the monitor aspect (i.e. 4:3, 16:9, 16:10, ...). The application aspect is the aspect ratio that the application expects (4:3 for everything).

Clicking the "16:9" button letterboxes the app's fullscreen display to suit a 16:9 display (black strips on the left and right).

"16:10" does the same but for a 16:10 monitor. Default for 4:3 fills the entire screen irrespective the monitor aspect.

"Vsync" enables vertical sync and show framerate shows an average framerate over the last second in the top left hand corner of the screen.

"Forced compatibility" toggles the Windows compatibility flags for the application. Usually most apps will only need 16 bit colour. It may depend on your Windows installation. RRedline applications were designed for Windows 98. The 16 bit colour option is enabled for some demos automatically. They can be disabled by unticking "Forced compatibility settings" and clicking "Launch" or by right clicking on the EXE file in Windows Explorer, bringing up properties and disabling them from the compatibility tab.

App Specific Settings

Some apps have application specific settings. They vary depending on the app.

# Compatibility:

All the SDK demos, "Race to the RRedline!" demos and all RRedline version 2.0 apps should work (the one RReadline v1.0 app currently does not work).

Just run the launcher and from the "Windows Apps" tab select add app (to remove right click the app name in the list and select remove).

Launching games from the launcher, RLauncher, will automatically set compatibility settings for some, but not all apps. The launcher no longer needs to be running for games to work, once configure and launched once from the launcher. Subsequent launches can be directly from the app folder or shortcut.

For Quake 2 the following file (if you don't already have it) is needed:

https://nirvtek.com/downloads/refv1kb5.zip

MD5: 91580ded721714ec4b35c42b97adf6f6

This was supplied by Rendition and developed in conjunction with Id Software.

Hexen II

https://nirvtek.com/downloads/vh2b5r2.zip

MD5: eea7e2cecfc7aa6aa451f26c7be0bf70

This was developed by Raven software in conjunction with Rendition.

MDK

https://nirvtek.com/downloads/MDKRED.zip

MD5: 8dc8bf57da32a209b39721a36ca82fc4

See the earlier section on verifying MD5 signatures.

If the files are already part of your installation the download is unnecessary.

Supported apps:

vQuake II (Quake II)

https://youtu.be/qb1eYQ35iV0?si=zbSEeGVYDCC-H05o

- force fullscreen in rlauncher.exe and a resolution needs to be set (can be max). The Quake2/baseq2/config.cfg needs to be set to windowed.
- Does work with Remaster (add quake2.exe, configure in RLauncher, copy dlls\* and launch original game from Steam,). (\*to copy dlls you could just run the game from the launcher. This will copy the dlls and run the remaster. Quit and on subsequent runs launch original version from Steam).

vHexen II (Hexen II)

https://youtu.be/w0hFT8umNQw?si=BmMIbrdvZ-OxRSLL

Loading progress bars might not work correctly on Intel HD graphics. Discrete GPUs should be OK. With the September 10 2023 build of RReady, WIn98 compatibility or DxWnd is no longer required. It should run natively.

Monster Truck Madness 2

https://youtu.be/2Bom-ZSNiXw?si=8Gt5w5DYq1a3bEbF

No issues.

Heavy Gear 1 demo/Heavy Gear 1

https://youtu.be/UdNUEEuFKts?si=uR\_Y\_Set7ZKCf4ma

If after an update of RReady "Heavy Gear" missions fail to start crashing to the desktop:

- 1) Restart HG
- 2) Press [ESC] to bring up the system menu
- 3) In combat controls toggle the renderer to Software or Direct3D.
- 4) Start a mission and quit the mission once it starts up.
- 5) Bring up the system menu -> combat controls and switch back to RRedline

It should remain functional afterwards.

Exiting a mission may leave you with a black screen. Stick dgvoodo's Ddraw.dll along with D3dImm.dll in the game folder and it should work for most users. If a black screen persists, [ALT]+[TAB] out and then back in again after encountering a black screen and the mission completion screen should render. Heavy Gear 1 uses DirectDraw for some of its windowing and this has compatibility issues with OpenGL, which RReady uses.

#### Sub Culture/Sub Culture Demo

https://www.youtube.com/watch?v=f5JAAI6FYcE&t=25s

Should run without issue.

**MDK** 

https://youtu.be/Hgxik-rUWT4?si=sP5sbbD73fMTNbA5

No problems.

SODA Offroad '97

https://youtu.be/uiyCT3FMcQA?si=0hrHlju9fbHaMYQL

Intel HD graphics of all varieties will have issues rendering the menus. Not sure about AMD GPUs. Nvidia GPUs get a clean bill of health. Otherwise fully functional.

Die by the Sword

https://youtu.be/HUtbSuzfqqw?si=ue3Zo8I3WaxkzB9Y

Starting up WinDie.exe may be iffy and the menus can be randomly slow in Win11. You may have to initially start up with Win98 compatibility to be able to select "Rendition" as the renderer, but this needs to be done only on the first run.

*Grand Prix Legends (GPL)* 

https://www.youtube.com/watch?v=Rth5IU8zM2A

RLauncher's resolution settings should be set at default. Higher resolutions should be selected from the in-game options menu

Intel HD integrated gpu users will have issues. Discrete gpus should be fine.

#### Interstate '76

https://www.youtube.com/watch?v=EAjSmOrCef0&t=5s

Runs with DxWnd. Stable 2.05.96 should work as well as the upcoming release.

Check that the registry key at HKLM\Software\Microsoft\Windows

NT\CurrentVersion\AppCompatFlags\Layers does not have an entry for i76 (full filesystem path). Delete this key. Using an online store this key may have to be deleted every time the game store launcher runs.

#### Myth: The Fallen Lords

https://www.youtube.com/watch?v=vfCLjEXMM1o&t=57s

Needs WinXPSP2 compatibility set in Launcher. v1.3 Runs with dgvoodoo's directdraw.dll and d3dimm.dll present in the game folder. (XP SP2 compatibility is needed to fix a "too much RAM" bug with this game on modern Windows.)

This game should be run at 640x480 or the "default" resolution setting. It has a mouse lock in the [0,0]-(640,480) screen region which will render on screen controls inoperable. Running at "default" resolution should allow correct operation.

#### Mech Warrior 2 Titanium/Mercenaries

https://youtu.be/QunN6dDEGPo?si=19UfgoZBumtQ2t4E

Runs with DxWnd stable 2.05.96. Please see a guide for details.

#### Team Apache

Runs, skip the intro videos by pressing ESC 2-3 times quickly and the game should be fine from then on, though a few niggling issues still remain in the menus. Does not run on Intel HD graphics.

The videos need to be skipped because of corruption. Corrected versions of the videos do exist online, however they have nothing to do with RReady and will not work with the original game CD.

# Forumula 1 (1997)

https://youtu.be/kFRRI686S94?si=DsUrdHnP5B6Blyd-

Built for V1.0 of the RRedline API and with the October 12 2023 release is fully supported. Runs natively. Task Manager, if running, should be shutdown before launching as some strange interactions with the window occur (window lockup/busy cursor).

This has been tested on nvidia and Intel hardware. Alpha testing has confirmed that RReady does work on AMD hardware, but no exhaustive testing has been done. The shaders have been run against AMD offline shader validation tools and they appear to pass. Intel ARC remains untested.

Generally you should be fine with an nvidia gpu.

If it doesn't work or you have any suggestions please email support@nirvtek.com. RLauncher has a "View logfile" button near the bottom, which should help diagnose what's wrong (barring catastrophic failure, in which case an instrumented build would be necessary). If not "Zip log files" will zip up 4 generations of log files (the maximum maintained) and open an explorer view to %localappdata%\temp (where the log files live).

NirvSolo

### **Release Notes**

# 12 October 2023

- Initial support for Formula 1 Verité edition.

# 16 September 2023

- Corrects issue with RReady/SODA Offroad '97 not handling 320x240 correctly. RReady was primary tested at higher/monitor native resolutions with the game's internal resolution set to max (640x480), so this was never detected.
- Rlauncher no longer adds Remap320x240=640x480x60 to Rendition.cfg in the application folder when adding an application.

### 14 September 2023

- Initial Windows store release.