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ALVR is an open source remote VR display for Gear VR and Oculus Go. With it, you can play SteamVR games in your standalone headset.

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polygraphene Fix README		Latest commit 784fe7a 4 days ago
ALVR	v1.9.1	4 days ago
alvr_server	v1.9.1	4 days ago
driver	Fix the wrong path of HMD icon.	8 days ago
openvr/headers	Update openvr sdk header from 1.0.8 to 1.0.15	7 days ago
shared	We got D3D11 CORRUPTION : CORRUPTED_MULTITHREADING message and vrserv…	7 days ago
test/webvr	Refactor test WebVR app.	12 days ago
.gitignore	Ignore release-files/	10 days ago
ALVR.sln	Fix some minor GUI issue.	13 days ago
LICENSE	Fix license	13 days ago
LICENSE-Valve	Fix license	13 days ago
README-ja.md	Fix README	4 days ago
README.md	Fix README	4 days ago
release.bat	Fix release.bat	12 days ago

📖 **README.md**

ALVR - Air Light VR

ALVR is an open source remote VR display for Gear VR and Oculus Go. With it, you can play SteamVR games in your standalone headset.

English | Japanese

Description

ALVR streams VR display output from your PC to Gear VR / Oculus Go via Wi-Fi. This is similar to Riftcat or Trinus VR, but our purpose is optimization for Gear VR. ALVR provides smooth head-tracking compared to other apps in a Wi-Fi environment using Asynchronous Timewarp.

Now, we have Gear VR / Oculus Go Controller support!

Note that many PCVR games require 6DoF controller or multiple buttons, so you might not able to play those games.

Requirements

ALVR requires any of the following devices:

- Gear VR
- Oculus Go

Device	Working?
Oculus Go	OK
GalaxyS8/S8+	OK
GalaxyS7	OK
GalaxyS9/S9+	Not tested
GalaxyS6(Edge)	OK

- High-end gaming PC with NVIDIA GPU which supports NVENC
  - Only Windows 10 is supported
- 802.11n/ac wireless or ethernet wired connection
  - It is recommended to use 802.11ac for the headset and ethernet for PC
    - You need to connect both to the same router
- SteamVR

Installation

Install ALVR server for PC

- Install SteamVR
- Install vc_redist.x64.exe from here
- Download the zip from Releases
- Extract the zip to any folder
- Launch ALVR.exe

Install ALVR client for headset

For Gear VR users

- (Install apk from SideloadVR) Yet to be released. Please wait.
- Get osig file from oculus website
- Install Apk Editor
- Download apk from Releases
- Open apk and put osig file on assets folder
- Build and install

For Oculus Go users

- Download apk from Releases

- Install apk via adb

Usage

- Launch ALVR.exe
- Press "Start Server" button or launch VR game
- SteamVR's small window will appear
- Launch ALVR Client in your headset
- IP Address of headset will appear in the server tab of ALVR.exe
- Press "Connect" button

Troubleshoot

- "Server is down" is displayed on right top corner on ALVR.exe
  - Retry execute driver_install.bat on driver folder
  - Terminate the process `vrserver.exe` on Task Manager
- IP Address is not displayed on ALVR.exe
  - It maybe a network issue
  - Confirm that the headset and PC are connected in the same LAN
  - Check the firewall settings (Permit UDP/9944 port)
  - If you can use adb, run `adb shell ping -c 5 (IP Address of PC)` then check success of ping
- Bad streaming quality (sometimes stops, laggy or broken picture)
  - We will add the functionality to change streaming resolution and bitrate
  - Connect with 5GHz 802.ac Wi-Fi or Connect wired LAN to headset
- If you get "A key component of Steam VR isn't working properly" error
  - Check if the graphic driver is updated

Uninstallation

- Execute driver_uninstall.bat in the driver folder
- Delete the install folder (ALVR does not use the registry)
- If you already deleted the folder without executing driver_uninstall.bat:
  - Open C:\Users\%USERNAME%\AppData\Local\openvr\openvrpaths.vrpath and check install directory
  - Execute `"C:\Program Files (x86)\Steam\steamapps\common\SteamVR\bin\win32\vrpathreg.exe" removedriver (install folder)` in Command Prompt

Future work

- Support streaming sound
- Support H.265 hevc encoding (currently H.264 only)
- Better installer

Build

ALVR Server and GUI (Launcher)

- Open ALVR.sln with Visual Studio 2017 and build
  - alvr_server project is the driver for SteamVR written in C++
  - ALVR project is the launcher GUI written in C#

ALVR Client

- Clone ALVR Client
- Put your osig file on assets folder (only for Gear VR)
- Build with Android Studio
- Install apk via adb

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