

VALVE'S VR PHILOSOPHY

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THE FINAL PLATFORM

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WHAT IS AN OPEN PLATFORM?

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HOW IS AN OPEN
PLATFORM GOOD?

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DESIGNED FOR
INTEROPERABILITY

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**HARDWARE IS SOFTWARE
AGNOSTIC**

**SOFTWARE IS HARDWARE
AGNOSTIC**

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NO GATEKEEPERS

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PERMISSION TO EXPERIMENT

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HOW IS AN OPEN
PLATFORM GOOD?

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NEW THING



MORE USERS



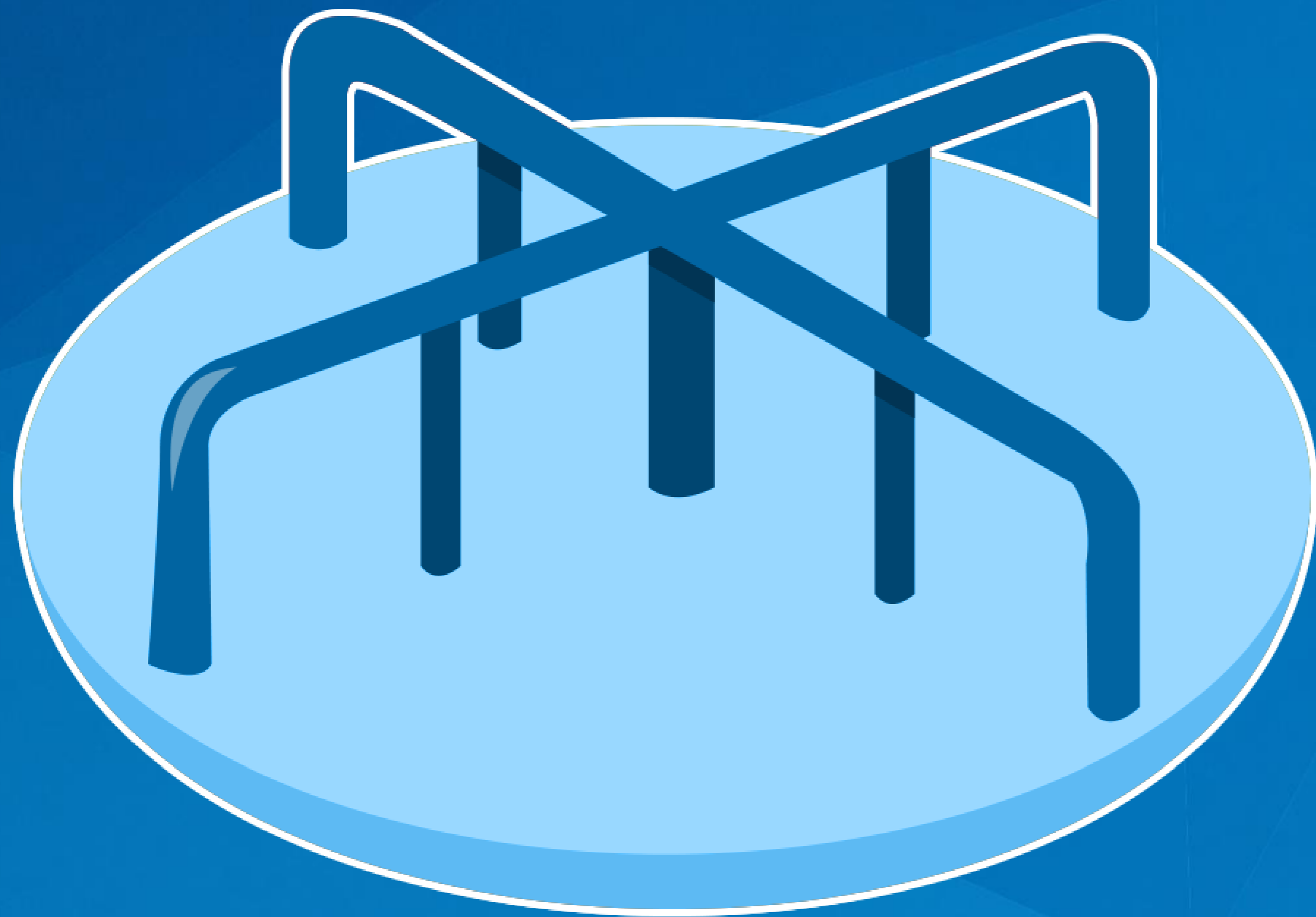
HAPPY USER



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WHY SHOULD VR BE OPEN?

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- **FIELD OF VIEW**
- **WEIGHT**
- **COST**
- **RESOLUTION**
- **CAMERA PASS-THROUGH**
- **EYE TRACKING**
- **GETTING RID OF THE TETHER**

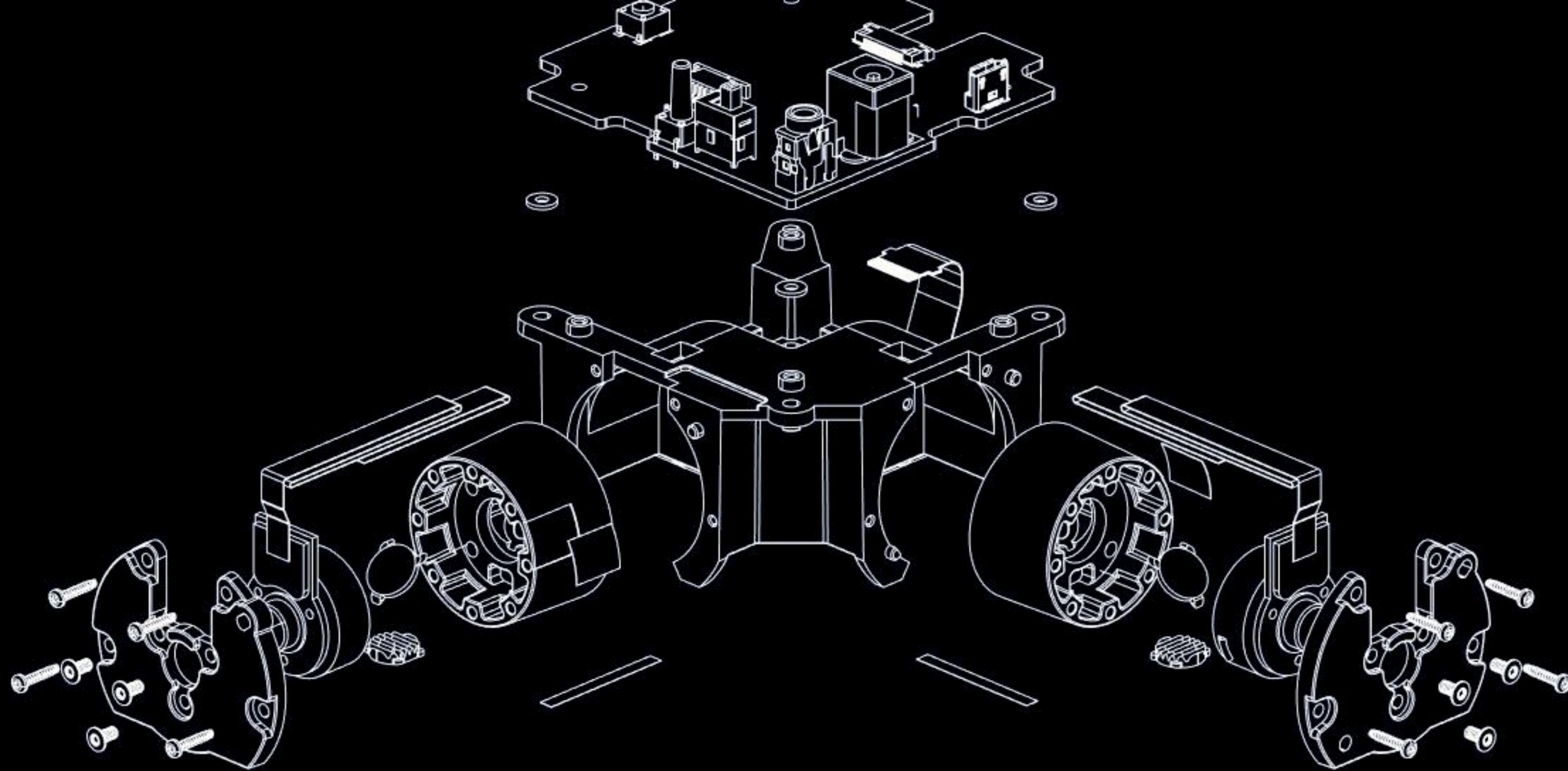
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WHAT IS VALVE DOING TO MAKE VR OPEN?

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LIGHTHOUSE

(STEAMVR TRACKING SYSTEM)

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- Support for input
- Lots of objects
- Large tracking volume
- Improved privacy
- Shockingly precise






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FOR INVENTORS, PRODUCT DESIGNERS, VR HACKERS, AND DEVICE MANUFACTURERS:

Use the World's Best 3D Tracking Technology, Royalty Free

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300 PARTNERS (SO FAR)

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BASE STATION DEVELOPMENT



BOY/GIRL

BATMAN

ROBIN

2017 BASE

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OPENVR

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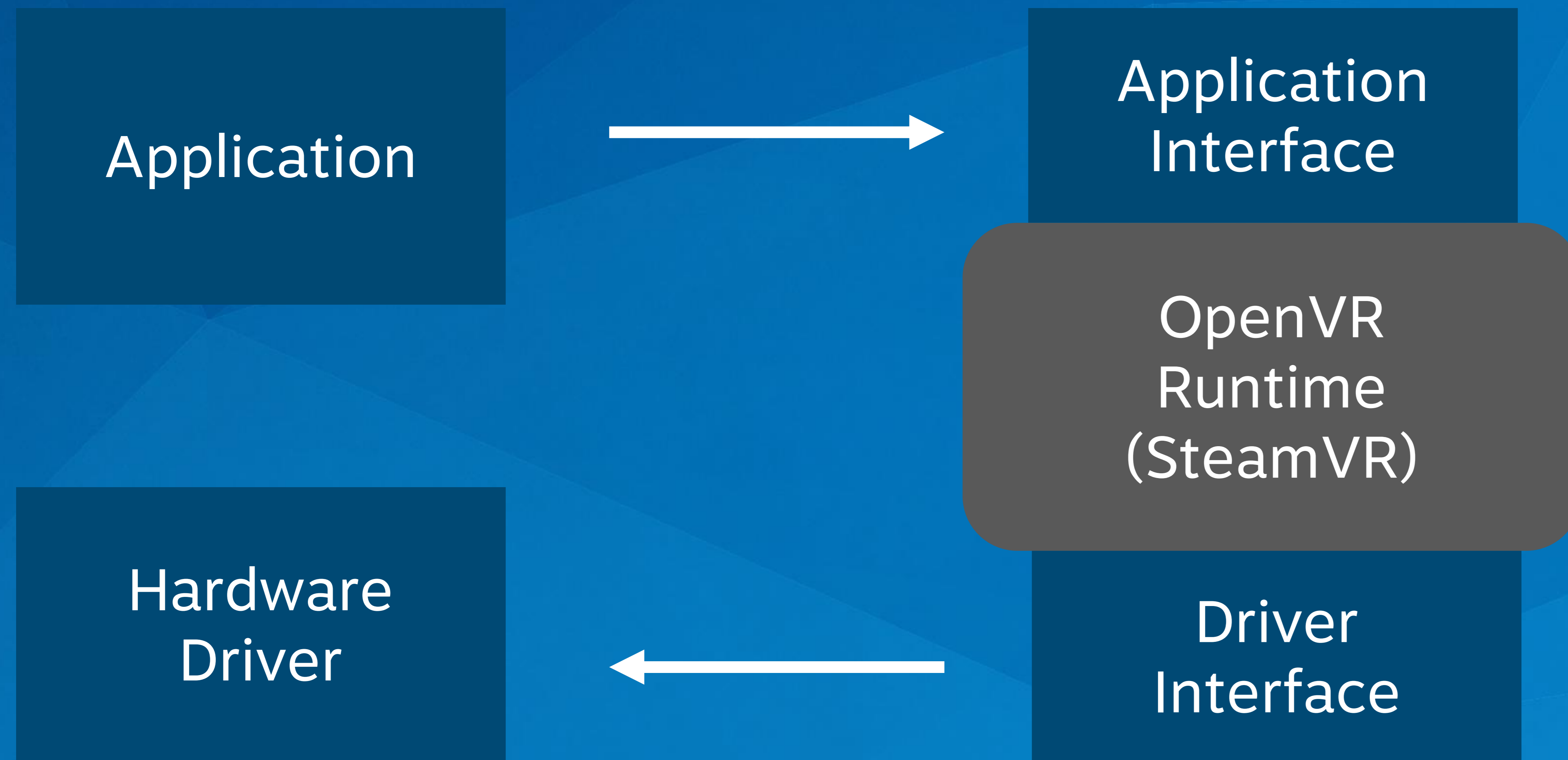
OpenVR

Application
Interface

Driver
Interface

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LOOKING FORWARD TO
2017

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INPUT DEVELOPMENT



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**EVEN MORE INPUT FROM
LIGHTHOUSE PARTNERS**

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INVESTING IN VR

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WE WANT YOUR FEEDBACK

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src : bash — Konsole

ricresources.cpp:6158:3: warning: #warning "GenericGraphics: non-Win32: miss [-Wcpp]
warning "GenericGraphics: non-Win32: missing"
ricresources.cpp:6305:3: warning: #warning "GenericGraphics: non-Win32: miss [-Wcpp]
warning "GenericGraphics: non-Win32: missing"
ricresources.cpp:6315:3: [-Wcpp]
warning "GenericGraphics:
ricresources.cpp:6327:3: [-Wcpp]
warning "GenericGraphics:
ricresources.cpp:6380:3: [-Wcpp]
warning "GenericGraphics:
ricresources.cpp:6501:3: [-Wcpp]
warning "GenericGraphics:
ricresources.cpp:6883:3: [-Wcpp]
warning "GenericGraphics:

echo "----" ;\
echo "---- LINKING EXE"
e] ----";\
echo "----" ;\
for f in ../../public
en if [-d \$f]; then fir
edit -c 1703953 \$f; fi; f
../devtools/bin/linux
me/bin/linux64/vrcomposit
BUG -DGNUC -DPOSIX -DCOMF
SIX -D_POSIX -DEXENAME=vr
D -D_EXTERNAL_DLL_EXT=.sc
alve/vr/steamvr/main/src/
-D_POSIX=1 -DLINUX=1 -DPC
LOC_OVERRIDE -I/home/pgri
ffais/src/valve/vr/steamv
r/main/src/public/tier0 -
ier1 -I/home/pgriffais/sr
rc -I/home/pgriffais/src/
e/pgriffais/src/valve/vr/
alve/vr/steamvr/main/src/
vr/steamvr/main/src/thirc
/steamvr/main/src/public/
xternal/steamworks_sdk/p
src/external/steamworks_s
rc/external -I/home/pgrif
04 -I/home/pgriffais/src/
trings -Wno-multichar -Wr
ue -Wno-missing-field-ini
ffsetof -Wno-float-equal
-Wformat-security -fvisi
ast-math -fno-omit-frame
tch-loops -fPIC -pipe -l
-needed -Wl,--as-needed -
omit-frame-pointer -ftree
--build-id -o ../../publ
--start-group ./obj_vrcc
ositor_linux64/release/di
e.o ./obj_vrcompositor_li
ux64/release/hmdwindowsd
./obj_vrcompositor_linux
ase/vrcompositor.o ./obj
obj_vrcompositor_linux64/
se/vr_comp_tracked_camera.o ../../thirdparty/protobuf-2.6.1/bin/linux64/libprot
.a ../../public/lib/linux64/vrcommon.a ../../external/libXNVCtrl/libXNVCtrl.a -
thirdparty/sdl2-2.0.3/bin/linux64 -lsdl2 -L../external/steamworks_sdk/redist
table_bin/linux64 -lsteam_api -L../public/sdk/lib/linux64 -lopencv_api -v
-lz -lgomp -lX11 -lXext -lxcb -lvulkan -Wl,--end-group -lm -ldl /usr/lib/
x86_64-linux-gnu/4.8/libstdc++.a -lpthread ;

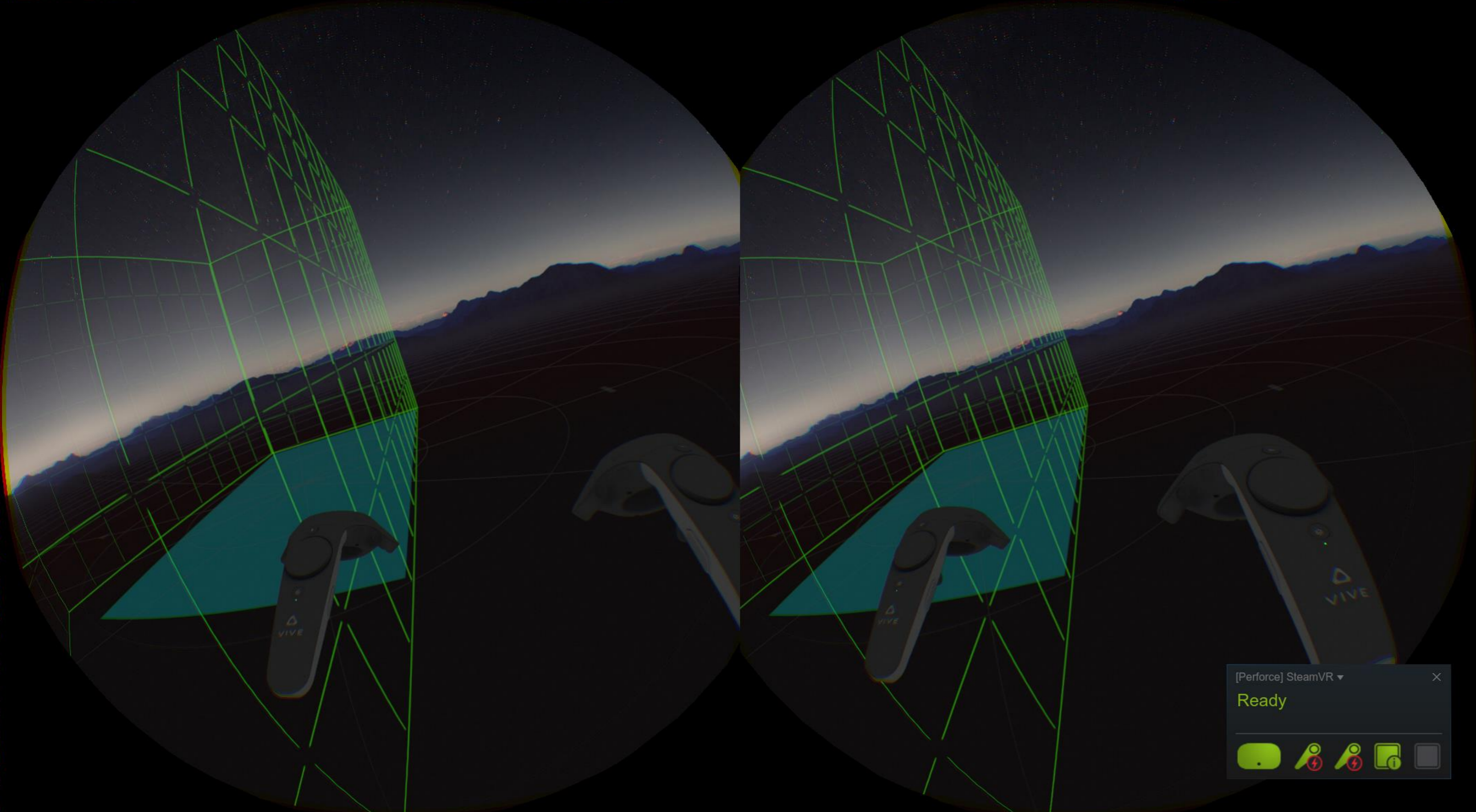
LINKING EXE ../../public/runtime/bin/linux64/vrcompositor [release] ----
[2]: Entering directory `/home/pgriffais/src/valve/vr/steamvr/main/src/vrdas
rd'

VRTest : bash — Konsole

drwxr-xr-x 2 pgriffais pgriffais 4096 Apr 19 15:38 ProjectSettings
drwxr-xr-x 6 pgriffais pgriffais 4096 Apr 19 15:38 Temp
drwxr-xr-x 6 pgriffais pgriffais 4096 Apr 19 15:38 vrTest_Data
-rwxr-xr-x 1 pgriffais pgriffais 1984 Apr 19 15:38 VRTest.sln
-rwxr-xr-x 1 pgriffais pgriffais 61966386 Apr 19 15:38 vrtest.x86_64
pgriffais@pgriffais:~/VRTest\$
pgriffais@pgriffais:~/VRTest\$
pgriffais@pgriffais:~/VRTest\$ 1

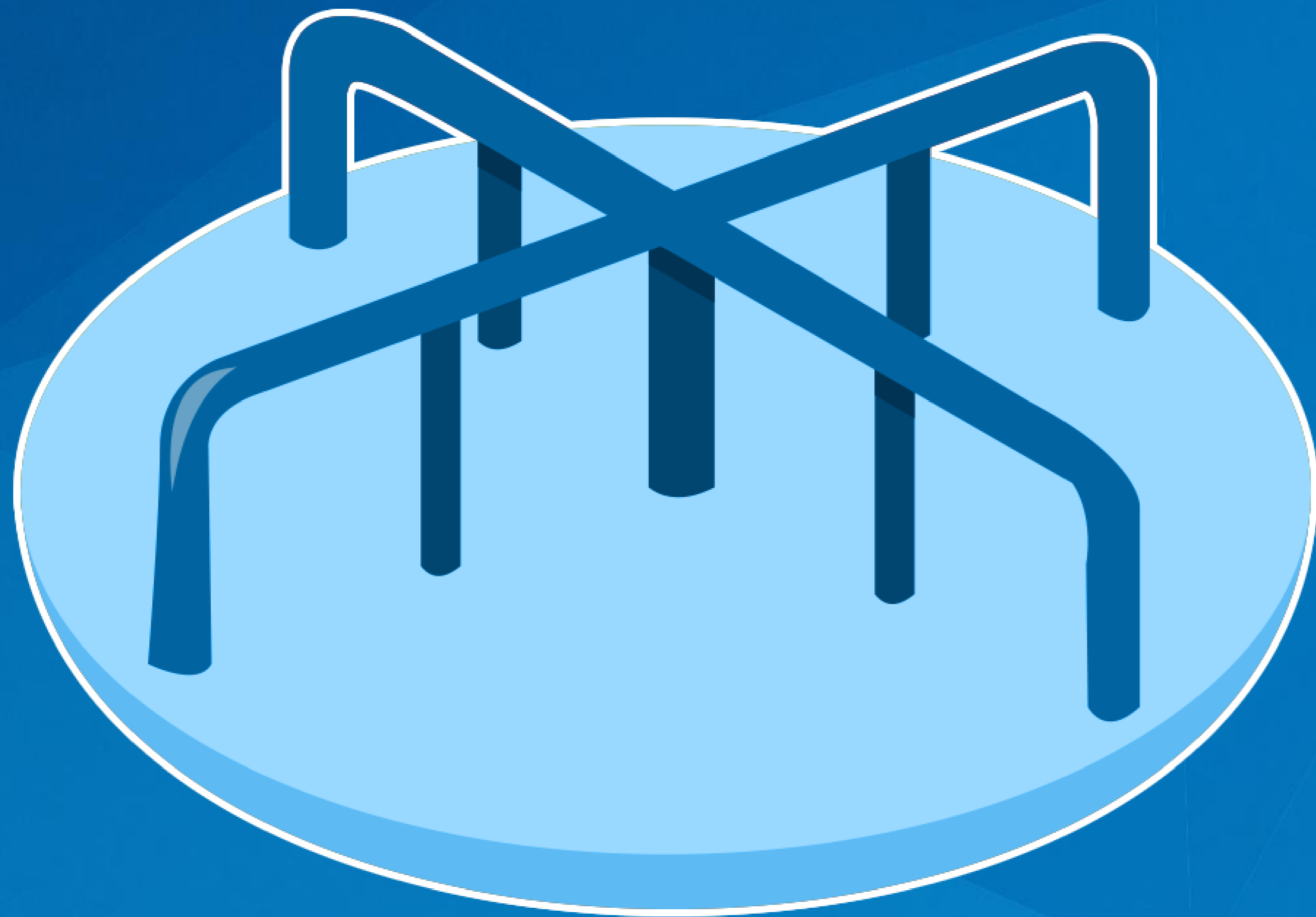
bin : vrmonitor — Konsole

ioctl (GFEATURE): Broken pipe
ioctl (GFEATURE): Broken pipe
ioctl (GFEATURE): Broken pipe
ioctl (GFEATURE): Broken pipe
ioctl (GFEATURE): Broken pipe
ioctl (GFEATURE): Broken pipe
ioctl (GFEATURE): Broken pipe
ioctl (GFEATURE): Broken pipe
ioctl (GFEATURE): Broken pipe



[Perforce] SteamVR
Ready
[Icons: SteamVR logo, battery, connection status, etc.]

Segmentation fault (core dumped)
pgriffais@pgriffais:~/VRTest\$ ^C
pgriffais@pgriffais:~/VRTest\$;
bash: syntax error near unexpected token `';'
pgriffais@pgriffais:~/VRTest\$ l
total 546820
drwxr-xr-x 9 pgriffais pgriffais 4096 Oct 4 09:11 .
drwxr-xr-x 97 pgriffais pgriffais 20480 Oct 4 07:52 ..
-rwxr-xr-x 1 pgriffais pgriffais 7188 Apr 19 15:38 Assembly-CSharp.csproj
-rwxr-xr-x 1 pgriffais pgriffais 8044 Apr 19 15:38 Assembly-CSharp-Editor.csproj
shaders/vulkan/tracked_camera_reprojection_vs.spv
shaders/vulkan/tracked_camera_lines_vs.spv
shaders/vulkan/distort_ps.spv
shaders/vulkan/distort_ps_gamma.spv
shaders/vulkan/distort_ps_layered.spv
shaders/vulkan/distort_ps_mc.spv
shaders/vulkan/distort_ps_gamma_mc.spv
shaders/vulkan/distort_ps_layered_mc.spv
shaders/vulkan/distort_ps_nd.spv
shaders/vulkan/distort_ps_gamma_nd.spv
shaders/vulkan/distort_ps_layered_nd.spv



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