






 00:04:25
06/02/2024 


 Razer Blackshark (Razer BlackShark V2 Pro 2.4)


 HP X24ih (NVIDIA High Definition Audio)

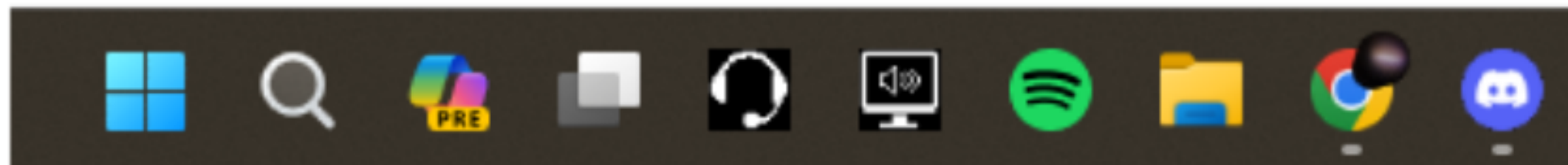


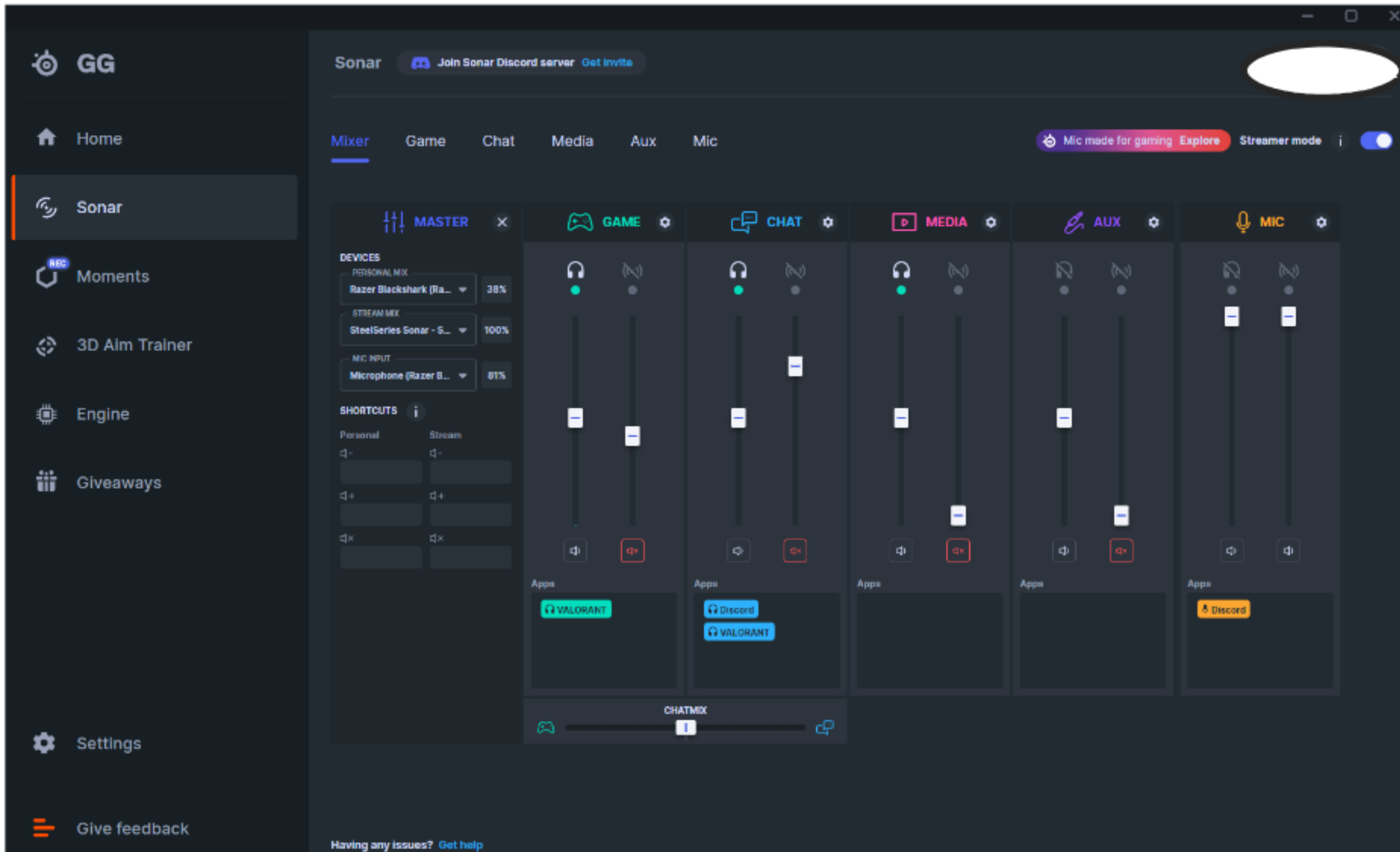
00:04:25
06/02/2024



 Razer Blackshark (Razer BlackShark V2 Pro 2.4)

 HP X24ih (NVIDIA High Definition Audio)





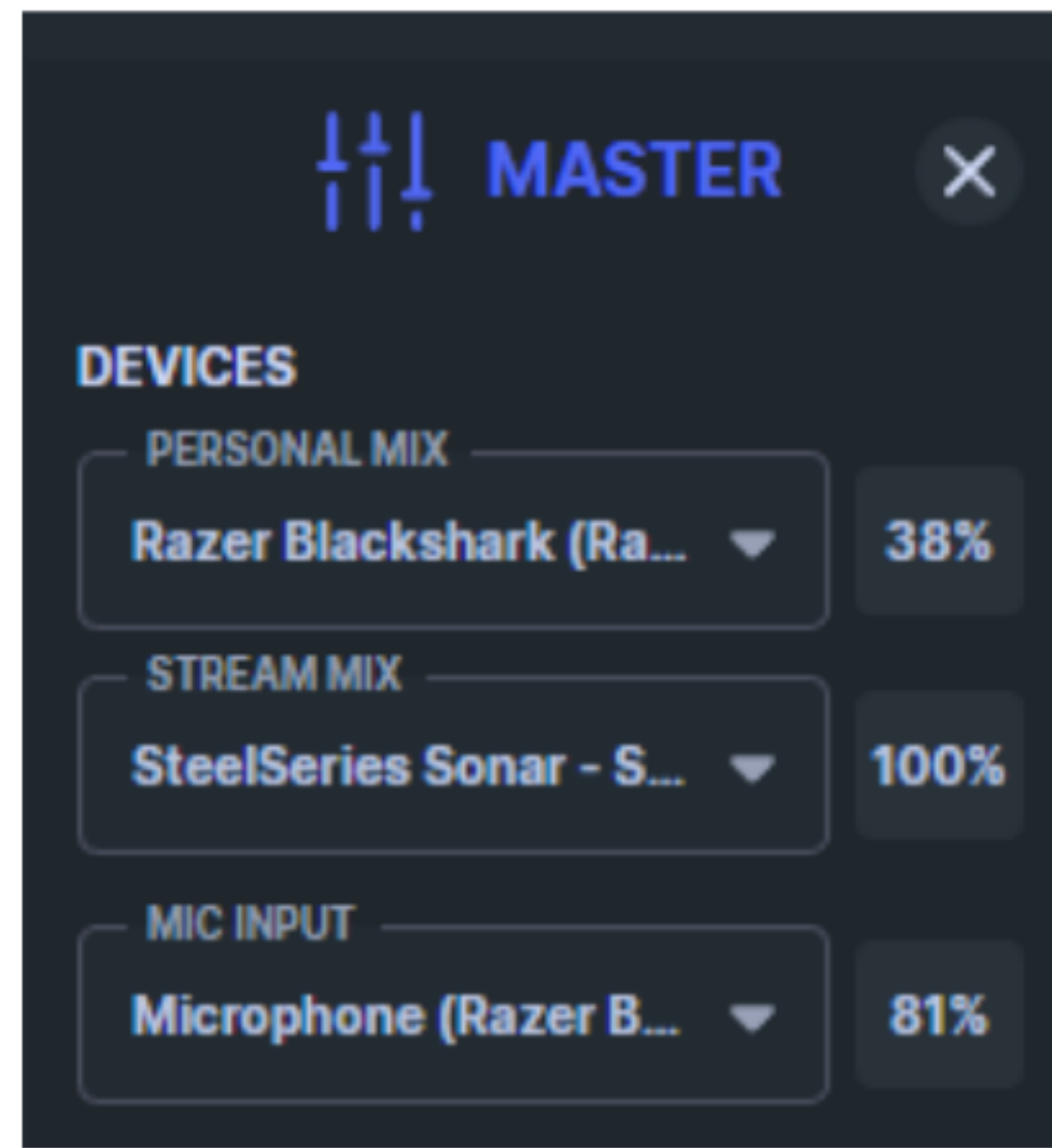
Output

Choose where to play sound
Apps might have their own settings

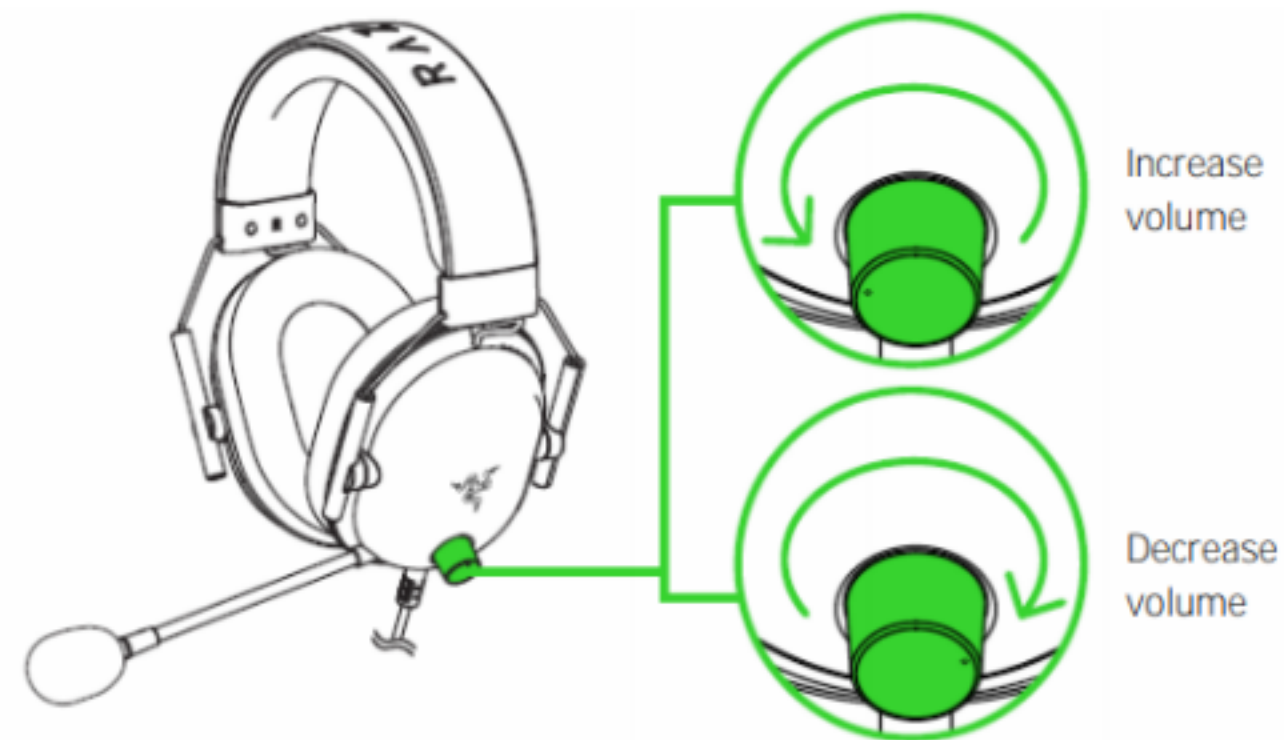
- ☐ HP X24ih
NVIDIA High Definition Audio
- ☐ SteelSeries Sonar - Media
SteelSeries Sonar Virtual Audio Device
- ☐ SteelSeries Sonar - Stream
SteelSeries Sonar Virtual Audio Device
- ☒ SteelSeries Sonar - Gaming
SteelSeries Sonar Virtual Audio Device
- ☐ SteelSeries Sonar - Chat
SteelSeries Sonar Virtual Audio Device
- ☐ SteelSeries Sonar - Microphone
SteelSeries Sonar Virtual Audio Device
- ☐ Razer Blackshark
Razer BlackShark V2 Pro 2.4
- ☐ SteelSeries Sonar - Aux
SteelSeries Sonar Virtual Audio Device

[Pair a new output device](#)





THERE IS NO INDICATOR ON MY SCREEN THAT IM ADJUSTING THE VOLUME



I DO IT BLINDLY (THIS IS THE NEXT ISSUE TO SOLVE - a visual indicator on my screen that shows that I'm adjusting my headsets volume idk)

So obviously I had to search for a solution online

I started off by trying to improve the .bat files behind these icons



```
*headset.bat - Notepad
File Edit View

NIRCMD setdefaultsounddevice "SteelSeries Sonar - Gaming"

DevManView.exe /enable "Razer Blackshark"

net stop audiosrv
net stop AudioEndpointBuilder
net start audiosrv
net start AudioEndpointBuilder

DevManView.exe /enable "Razer Blackshark"
```


set default sound device to razer

*headset.bat - Notepad

File Edit View

```
DevManView.exe /enable "Razer Blackshark"
```

DevManView.exe

| DevManView | | | | | | | | |
|---|----------------------------|-------------------------|-----------------------|------------------|-------------------------|-----------------------------|--------------|-------------|
| File Edit View Options Help | | | | | | | | |
| Device Name | Manufacturer | Service | Device Type Code | Device Type Name | Device Instance ID | Location | Capabilities | Config Flag |
| Realtek PCIe GbE Family Controller | Realtek | rt68cx21 | Net | | PCI\VEN_10EC&DEV_81... | @System32\drivers\pci... | 0x00000000 | 0x00000000 |
| Realtek RTL8192EE Wireless LAN 802.11n PCI-... | Realtek Semiconductor ... | RTWlanE02 | Net | | PCI\VEN_10EC&DEV_81... | @System32\drivers\pci... | 0x00000000 | 0x00000001 |
| Remote Desktop Device Redirector Bus | Microsoft | rdpbus | System | | ROOT\RDPBUS\0000 | | 0x00000000 | 0x00000000 |
| Root Print Queue | Microsoft | | PrintQueue | | SWD\PRINTENUM\Print... | | 0x000000f0 | 0x00000000 |
| Sonar APO | SteelSeries ApS | | AudioProcessingObject | | SWD\DRIVERENUM\{e83... | | 0x000000d0 | 0x00000000 |
| Speakers (Dubbing Virtual Device) | Microsoft | | AudioEndpoint | | SWD\MMDEVAPI\{0.0.0... | | 0x000000d0 | 0x00000000 |
| Speakers (Razer BlackShark V2 Pro 2.4) | Microsoft | | AudioEndpoint | | SWD\MMDEVAPI\{0.0.0... | | 0x000000d0 | 0x00000000 |
| Speakers (Razer BlackShark V2 Pro 2.4) | Microsoft | | AudioEndpoint | | SWD\MMDEVAPI\{0.0.0... | | 0x000000d0 | 0x00000000 |
| Speakers (Razer BlackShark V2 Pro) | Microsoft | | AudioEndpoint | | SWD\MMDEVAPI\{0.0.0... | | 0x000000d0 | 0x00000000 |
| Speakers (Razer BlackShark V2 Pro) | Microsoft | | AudioEndpoint | | SWD\MMDEVAPI\{0.0.0... | | 0x000000d0 | 0x00000000 |
| Speakers (Razer BlackShark V2 Pro) | Microsoft | | AudioEndpoint | | SWD\MMDEVAPI\{0.0.0... | | 0x000000d0 | 0x00000000 |
| Speakers (Razer BlackShark V2 Pro) | Microsoft | | AudioEndpoint | | SWD\MMDEVAPI\{0.0.0... | | 0x000000d0 | 0x00000000 |
| Steam Streaming Microphone | Valve Corporation Audio... | SteamStreamingMicrop... | MEDIA | | ROOT\SteamStreaming... | | 0x00000000 | 0x00000000 |
| Steam Streaming Speakers | Valve Corporation Audio... | SteamStreamingSpeakers | MEDIA | | ROOT\SteamStreamingS... | | 0x00000000 | 0x00000000 |
| SteelSeries Apex 7 TKL | SteelSeries ApS | mshidkmdf | HIDClass | | USB\VID_1038&PID_161... | 000b.0000.0003.002.000.... | 0x00000080 | 0x00000020 |
| SteelSeries Apex 7 TKL | SteelSeries ApS | mshidkmdf | HIDClass | | USB\VID_1038&PID_161... | 0002.0000.0000.014.000.0... | 0x00000080 | 0x00000000 |
| SteelSeries Apex 7 TKL | SteelSeries ApS | mshidkmdf | HIDClass | | USB\VID_1038&PID_161... | 000b.0000.0003.002.000.... | 0x00000080 | 0x00000020 |
| SteelSeries Apex 7 TKL | SteelSeries ApS | mshidkmdf | HIDClass | | USB\VID_1038&PID_161... | 0002.0000.0000.014.000.0... | 0x00000080 | 0x00000000 |
| SteelSeries Device Factory | SteelSeries | ssdevfactory | System | | ROOT\SYSTEM\0001 | | 0x00000000 | 0x00000000 |
| SteelSeries GG Component | SteelSeries ApS | | SoftwareComponent | | SWD\DRIVERENUM\{19f... | | 0x000000d0 | 0x00000000 |
| SteelSeries GG Component | SteelSeries ApS | | SoftwareComponent | | SWD\DRIVERENUM\{19f... | | 0x000000d0 | 0x00000000 |
| SteelSeries Sonar - Aux (SteelSeries Sonar Virt... | Microsoft | | AudioEndpoint | | SWD\MMDEVAPI\{0.0.0... | | 0x000000d0 | 0x00000000 |
| SteelSeries Sonar - Chat (SteelSeries Sonar Virt... | Microsoft | | AudioEndpoint | | SWD\MMDEVAPI\{0.0.0... | | 0x000000d0 | 0x00000000 |
| | | | | | SWD\MMDEVAPI\{0.0.0... | | 0x000000d0 | 0x00000000 |
| | | | | | SWD\MMDEVAPI\{0.0.0... | | 0x000000d0 | 0x00000000 |
| | | | | | SWD\MMDEVAPI\{0.0.0... | | 0x000000d0 | 0x00000000 |
| | | | | | SWD\MMDEVAPI\{0.0.0... | | 0x000000d0 | 0x00000000 |
| | | | | | SWD\MMDEVAPI\{0.0.1... | | 0x000000d0 | 0x00000000 |
| | | | | | SWD\MMDEVAPI\{0.0.0... | | 0x000000d0 | 0x00000000 |
| | | | | | SWD\MMDEVAPI\{0.0.1... | | 0x000000d0 | 0x00000000 |
| SteelSeries Sonar - Stream (SteelSeries Sonar V... | Microsoft | | AudioEndpoint | | SWD\MMDEVAPI\{0.0.0... | | 0x000000d0 | 0x00000000 |
| SteelSeries Sonar - Stream (SteelSeries Sonar V... | Microsoft | | AudioEndpoint | | SWD\MMDEVAPI\{0.0.1... | | 0x000000d0 | 0x00000000 |
| SteelSeries Sonar Virtual Audio Device | Microsoft | SteelSeries_Sonar_VAD | MEDIA | | ROOT\MEDIA\0000 | | 0x00000000 | 0x00000000 |
| StoreMI Bottom Device | Advanced Micro Device... | rcbottom | SCSIAdapter | | PCI\VEN_1022&DEV_43... | @System32\drivers\pci... | 0x00000000 | 0x00000000 |
| StoreMI Bottom Device | Advanced Micro Device... | rcbottom | SCSIAdapter | | PCI\VEN_1022&DEV_43... | @System32\drivers\pci... | 0x00000000 | 0x00000000 |

Speakers (Razer BlackShark V2 Pro 2.4)

Microsoft

300 Devices, 1 Selected

NirSoft Freeware. <https://www.nirsoft.net>

set default sound device to razer

stop windows audio service
start windows audio service

set default sound device to razer again

```
*headset.bat - Notepad
File Edit View

DevManView.exe /enable "Razer Blackshark"

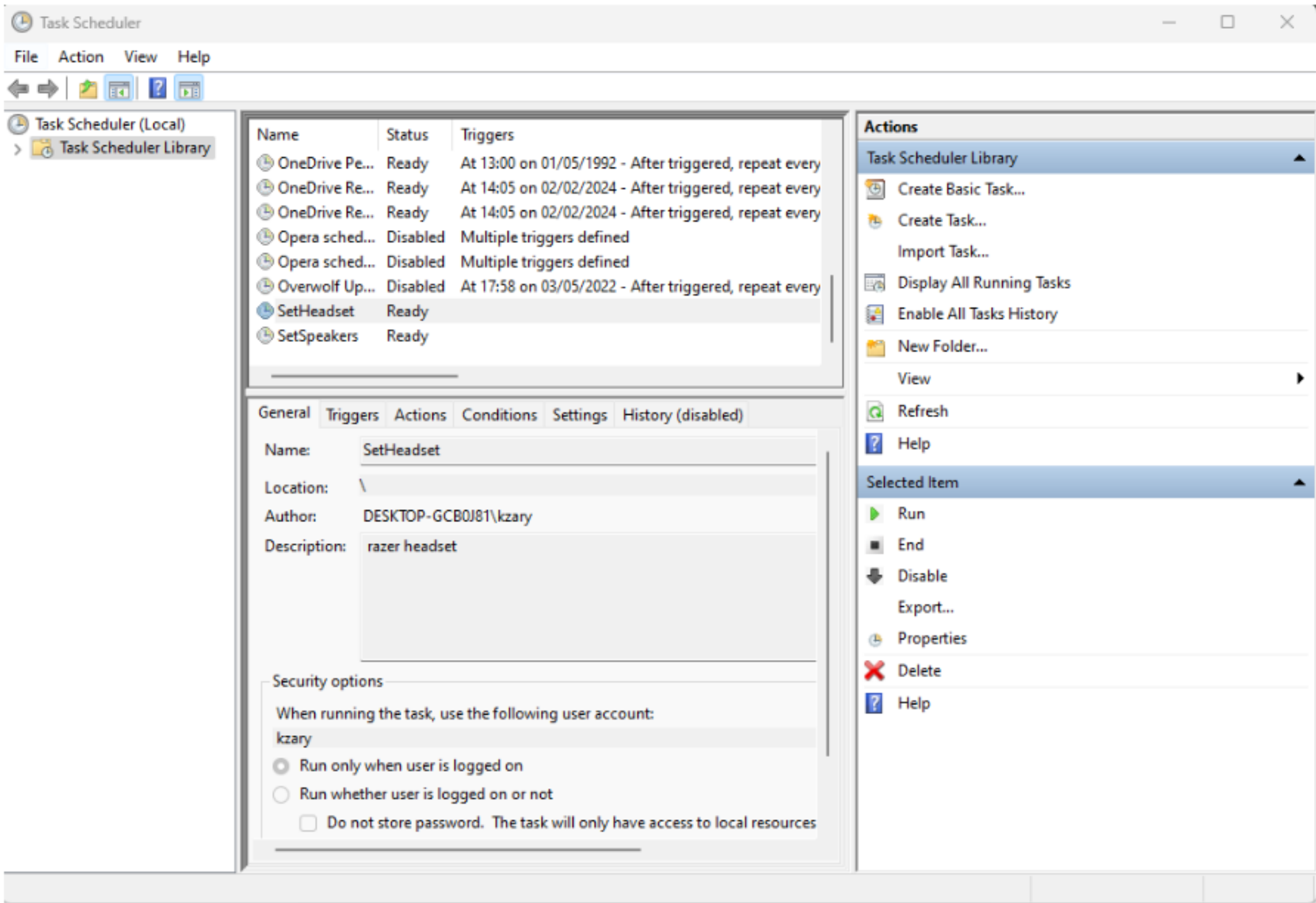
net stop audiosrv
net stop AudioEndpointBuilder
net start audiosrv
net start AudioEndpointBuilder

DevManView.exe /enable "Razer Blackshark"
```

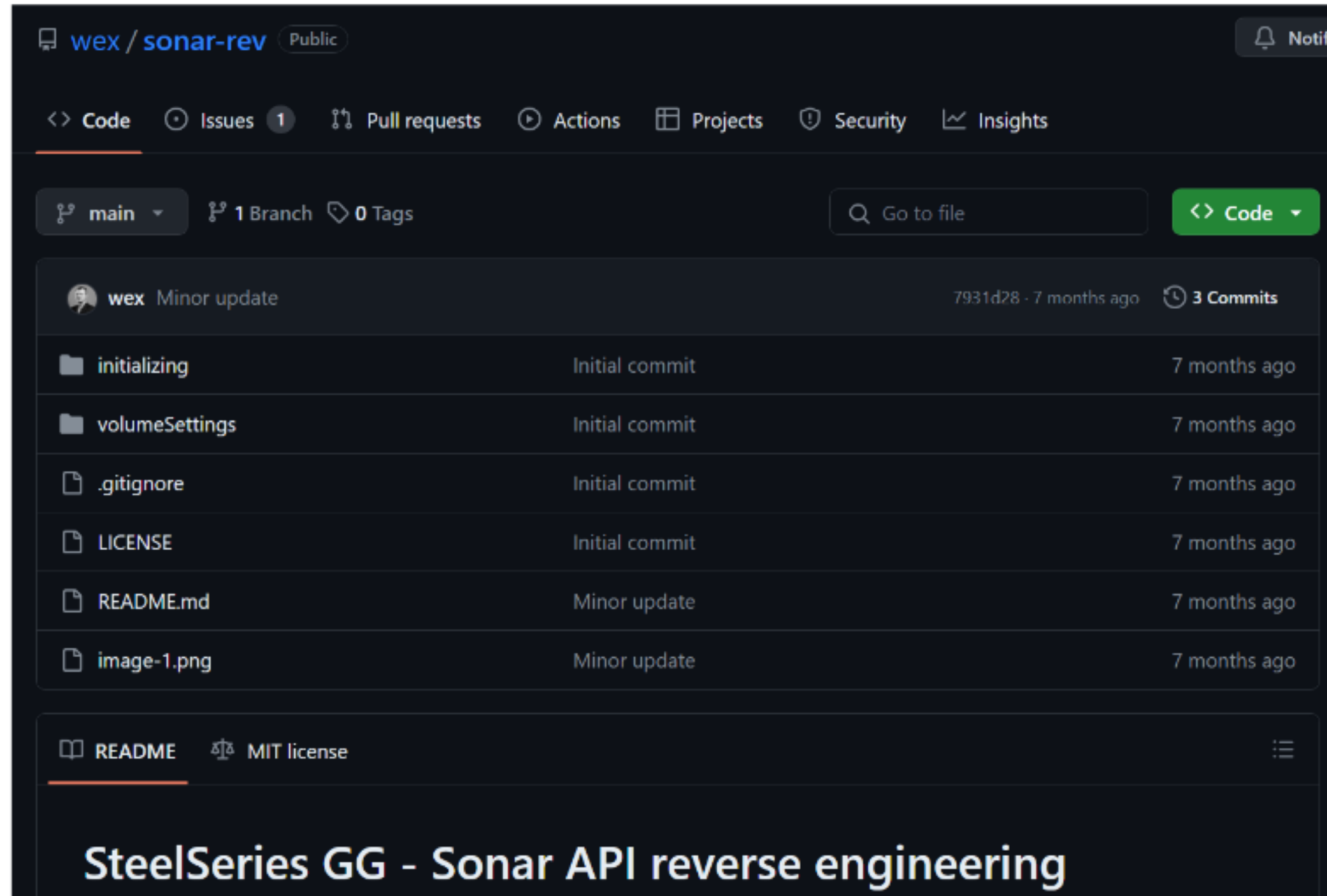
VERY UNRELIABLE

SUNK COST FALLACY

sticking with a losing or failed venture because you've already invested a significant amount of time, money, or other resources that you can't get back.



Discontent, I went back online to search for a solution



SONAR API REVERSE ENGINEERING???

why does a local sound manager software need an API i wondered

Some examples

Mute/unmute classic-mode Game-channel

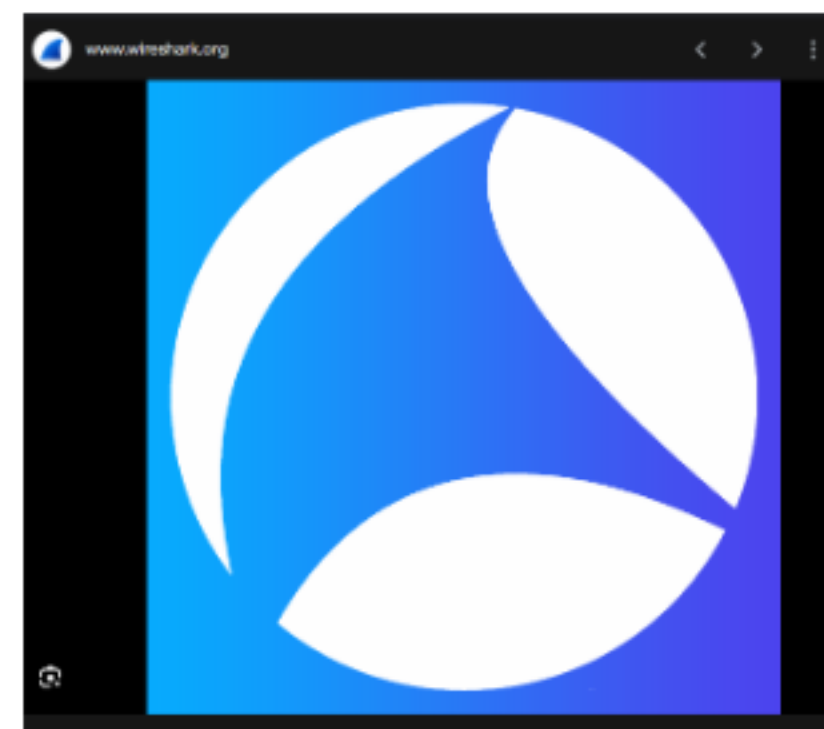
```
curl -X PUT http://127.0.0.1:13108/volumeSettings/classic/game/Mute/true -H "Content-Length: 0" -H "Hc  
curl -X PUT http://127.0.0.1:13108/volumeSettings/classic/game/Mute/false -H "Content-Length: 0" -H "t
```

Set classic-mode Game-channel volume to 100%

LOCAL ADDRESS



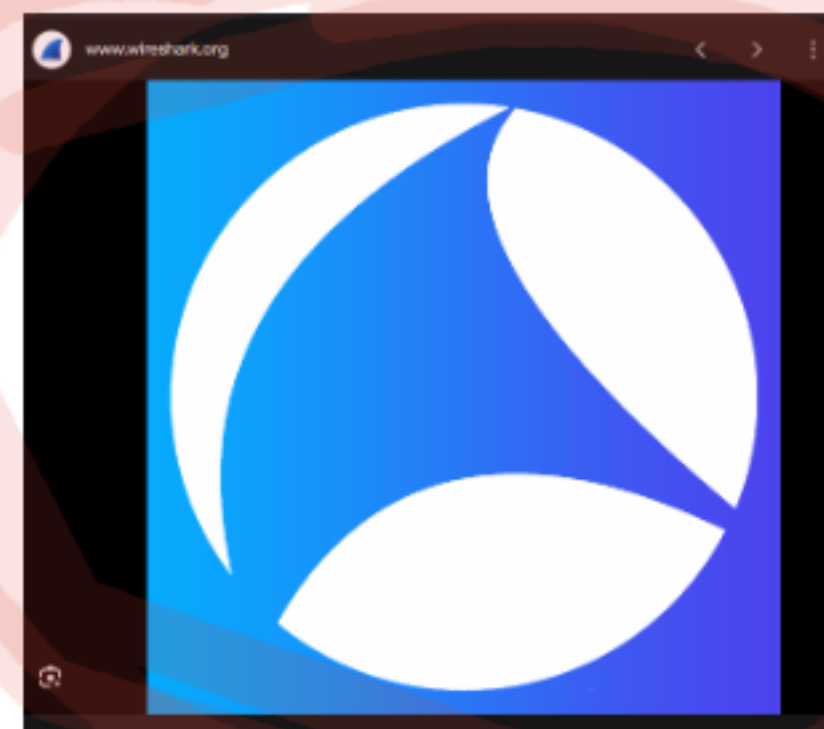
POSTMAN

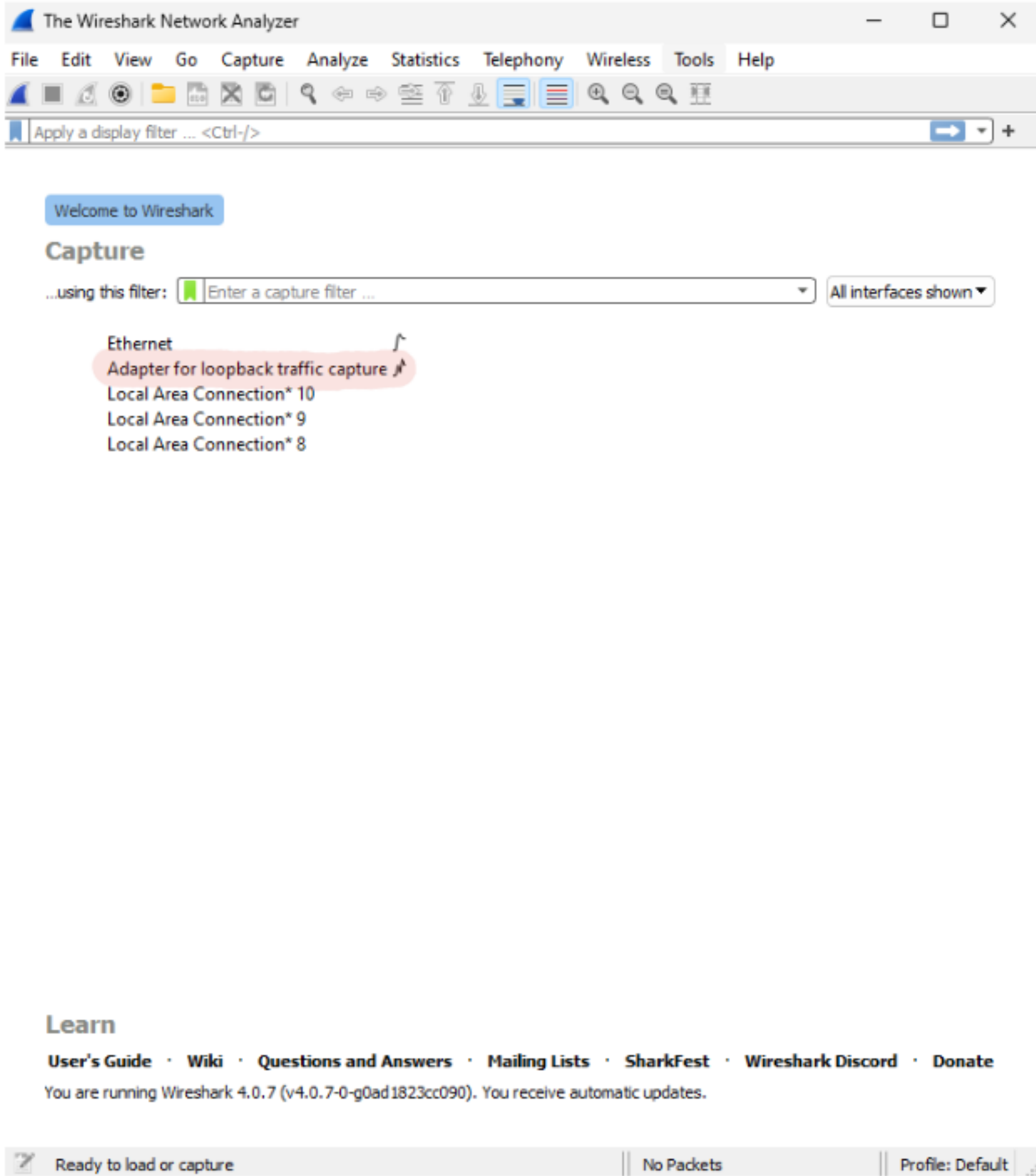
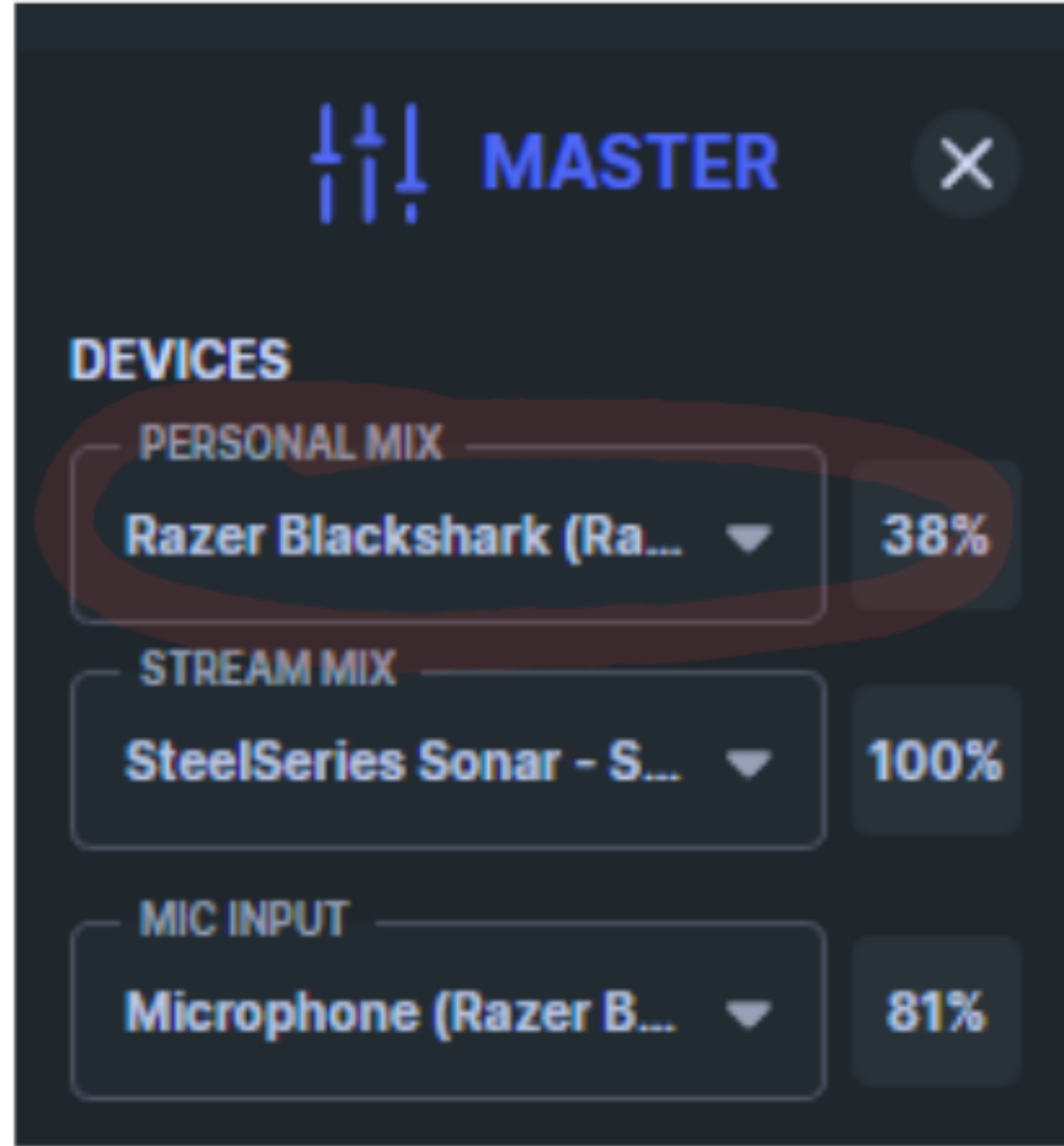


 **SIDEQUEST**

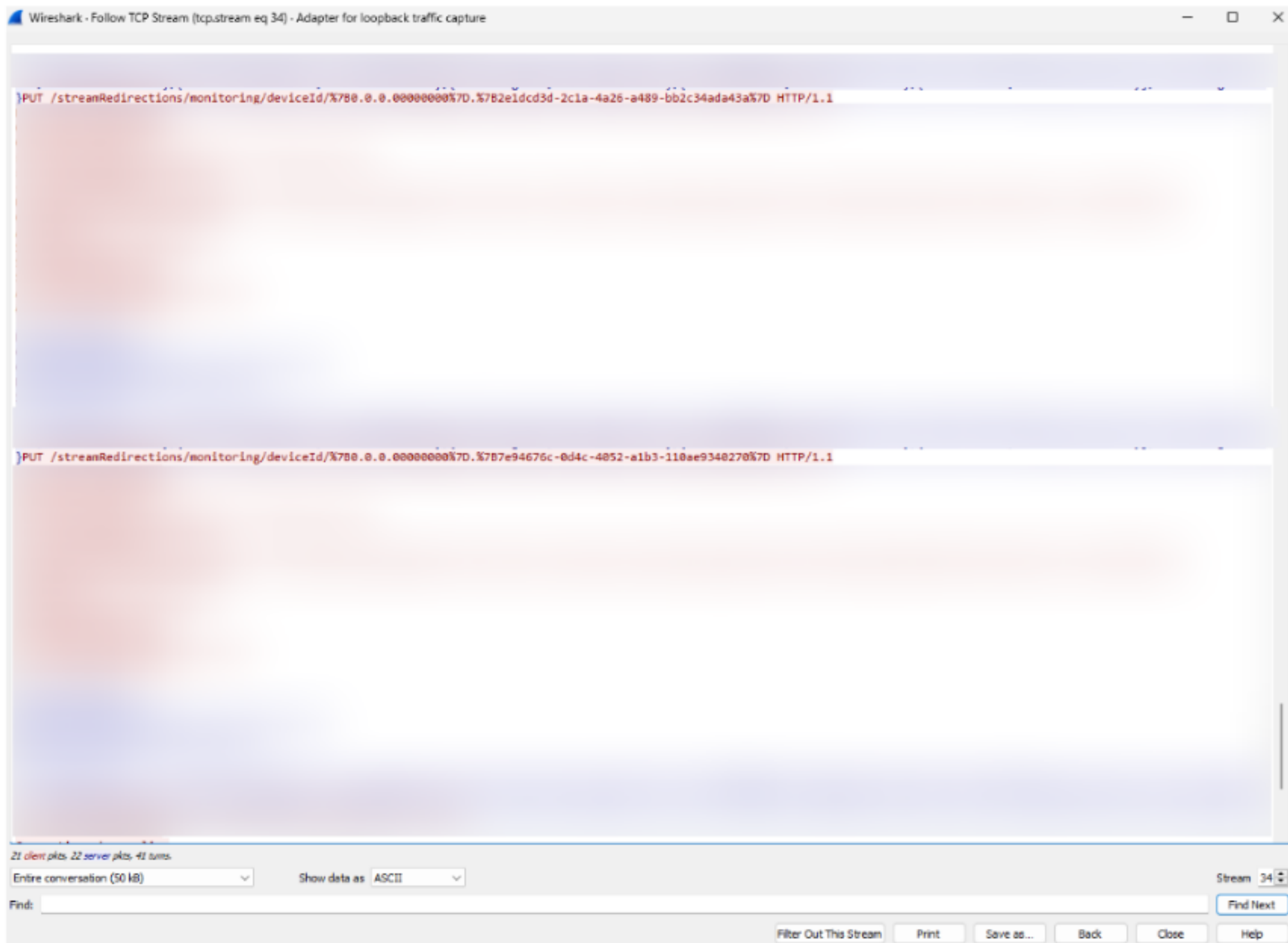


POSTMAN





| | |
|-----------|--|
| HTTP | 631 PUT /streamRedirections/isStreamMonitoringEnabled/false HTTP/1.1 |
| TCP | 44 50454 → 54395 [ACK] Seq=37194 Ack=13494 Win=2147840 Len=0 |
| HTTP/JSON | 188 HTTP/1.1 200 OK , JavaScript Object Notation (application/json) |
| TCP | 44 54395 → 50454 [ACK] Seq=13494 Ack=37338 Win=2123776 Len=0 |
| HTTP/JSON | 824 POST /analytics/track HTTP/1.1 , JavaScript Object Notation (application/json) |
| TCP | 44 50454 → 54399 [ACK] Seq=3610 Ack=6337 Win=2154752 Len=0 |
| HTTP | 136 HTTP/1.1 200 OK |
| --- | --- |



right click and click follow TCP Stream


```
E:\Documents\NIRCMD\Development>curl -d '{"event":"Element Clicked","properties":{"screen_name":"mixer","mode":"stream",  
"role":"master","current_panel":"standard","element_name":"sonar_switch_master_panel","element_type":"button"}}' -H "Cont  
ent-Type: application/json" -X PUT http://127.0.0.1:58460/streamRedirections/monitoring/deviceId/%7B0.0.0.00000000%7D.%7  
B2e1dcd3d-2c1a-4a26-a489-bb2c34ada43a%7D""
```

WORKS

```
*headset.bat - Notepad
File Edit View

curl -d '{"event":"Element
Clicked","properties":{"screen_name":"mixer","mode":"stream","role":"master",
"current_panel":"standard","element_name":"sonar_switch_master_panel","elemen
t_type":"button"}}' -H "Content-Type: application/json" -X PUT
http://127.0.0.1:58460/streamRedirections/monitoring/deviceId/%
7B0.0.0.00000000%7D.%7B7e94676c-0d4c-4052-a1b3-110ae9340270%7D
```



PYTHON DEVELOPMENT

```
simmerHeadset.py - E:\Documents\NIRCMD\simmerHeadset.py (3.10.0)
File Edit Format Run Options Window Help

import subprocess
import json, time

# Define your command as a string
cmd_command = 'curl https://127.0.0.1:6327/subApps -k'

# Use subprocess.run() to execute the command
result = subprocess.run(cmd_command, shell=True, stdout=subprocess.PIPE, stderr=subprocess.PIPE, universal_newlines=True)

json_string = str(result.stdout)
# Parse the JSON string into a Python dictionary
data = json.loads(json_string)
# Extract the value
port = str(data['subApps']['sonar']['metadata']['webServerAddress'])
# Print the value
print(port)

#####

cmd_prefix = ""
curl -d '{"event":"Element Clicked","properties":{"screen_name":"mixer","mode":"stream","role":"master","current_panel":"standard","element_name":"sonar_switch_master_panel","element_type":

headset_cmd = (cmd_prefix + port + "/streamRedirections/monitoring/deviceId/%7B0.0.0.00000000%7D.%7B7e94676c-0d4c-4052-a1b3-110ae9340270%7D").strip()

speaker_cmd = (cmd_prefix + port + "/streamRedirections/monitoring/deviceId/%7B0.0.0.00000000%7D.%7B2e1dcd3d-2c1a-4a26-a489-bb2c34ada43a%7D").strip()

#####

activate_headset = subprocess.Popen(headset_cmd, shell=True, stdout=subprocess.PIPE, stderr=subprocess.STDOUT)

#activate_speaker = subprocess.Popen(speaker_cmd, shell=True, stdout=subprocess.PIPE, stderr=subprocess.STDOUT)
```

