

CROSSGRIDDER 1.4

Windows VSTs on macOS and Linux

Guide revision: 1.4 January, 14th 2022

"CrossGridder stands to AudioGridder as IronMan stands to Tony Stark."

Tony Stark is awesome, right?
He has a vast knowledge, but physical limits due to his human nature, which he surpasses by wearing the armor.

The same happens to AudioGridder when wearing its own: CrossGridder.

CrossGridder isn't just copying AudioGridder, it's a tool that expands its functionalities.

Getting to a universally compatible version required few weeks of trials and improvements.

Now...

Would you like to learn how laser beams work when the enemy attacks?

READ THE GUIDE:)

DISCLAIMER

- . This file is provided as it is. I would not answer for any damage caused by its use.
- . **CrossGridder** was tested on different machines and operative systems; version 1.4 is a universal bottle, which solves previous compatibility and installation issues.
- . Its predefined settings are intended for Local Setups: a DAW and CrossGridder coexist on the same machine.
- . Additional settings, detailed in this guide, are necessary to connect it to the AudioGridder plugin.
- . CrossGridder is virus-free and built with free and open-source software.
- . CrossGridder is free and will always be.
- . CrossGridder and its PDF guide are found at Github.
- . Version 1.4 adds updates and corrections. Reading the guide is suggested, even if you have already used CrossGridder.
- . I kindly ask you to subscribe to my channels, especially Github and YouTube. You will get notified with updates and it will help me to maintain this project. Thank you!

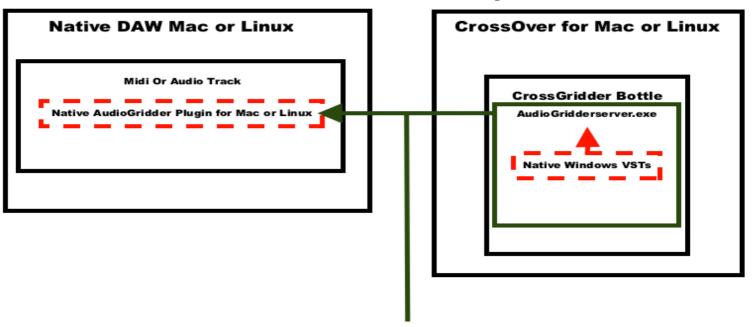
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01. What is CrossGridder?

- . **CROSSGRIDDER** is a bottle for CrossOver 20 and 21. It basically contains AudioGridderServer.exe, a Windows VSTs server which connects to the AudioGridder plugin through an IP address.
- . It was thought to use those Windows-only VSTs also on Mac and Linux.
- . It works from Mojave to Monterey and Ubuntu Studio 21.
- . A "bottle" is a Windows system reduced to the minimum, with less functionalities (which we don't need in this context), but that requires less CPU, RAM and disk space compared to a virtual machine and is highly customized to run the best way possible any Windows app we will install into it.
- . As of now, CrossGridder is possibly the best compromise on macOS and best solution on Linux in its field. Other methods (VEP, virtual machines) can coexist in the same environment, when necessary.
- . No particular skills are required, only the time and patience to follow this guide. It's all written here.

LOCAL SETUP: One Mac or Linux system contains



02. What CrossGridder can do for you!

.. Run Windows VSTs on macOS and Linux

- . Run Windows VSTs through CrossGridder, connecting it to the AudioGridder plugin.
- . Automate parameters activating them from the AudioGridder plugin and learn them as you would for any other native plugin.

.. Create as many Servers as your system can handle

. Overcome AG server limitation of 1 GUI per server.

.. Be a sandboxed environment for VST trial

- . Evaluate plugins from inside CrossGridder.
- . Leave your system clean, delete the bottle when you decide.

.. Or a great alternative to virtual machines

- . Requires less CPU, RAM and Disk Space.
- . Generates less audio latency.
- . Stop dealing with 2 desktops on 1 screen.

.. Can be used along its past and future versions

- . Don't delete previous bottles unless necessary.
- . This is also the concept behind CrossGridder's multiple servers setup.

.. And you can carry your plugins anywhere

- . Just export the bottle and import it on a different system.
- . iLok License Manager works as a native app, the Soundtoys 5 bundle was used to transfer and activate the licenses.

03. Requirements and Limitations

. Shared

- . Use a light desktop theme to prevent "camouflage" of the AG server icon in the Menu bar
- . Don't change settings or buffer size while composing.
- . Install your Windows VSTs inside CrossGridder.

. MacOS

- . Works from Mojave to Monterey, HS and prior weren't tested.
- . Plugins requiring OpenGL 3.1 compat will not be validated, it is a Mac limit and it is out of my control. (e.g. Softube, SSL).

.Ubuntu Studio 21

- . Plugins requiring OpenGL compat 3.1 and above DO work, granted your GPU supports it.
- . CrossGridder was tested on Ubuntu Studio 21 and Ardour.

. Predefined Bottle settings

- . High Resolution Mode (CO Sidebar > bottle > Settings)
 - . Default: Off
 - . Keep it off to maximize plugins compatibility.
 - . If a plugin crashes, check if it's on.

DXVK Backend for D3D11 (CO Sidebar > bottle > Settings)

- . Default: Off
- . Keep it off to maximize plugins compatibility and prevent crashes.

. Wine Configuration > Graphics > Emulate a virtual desktop

- . Default: **Off**
- . Keep it off to prevent server freezing and CPU spikes.

04. CrossGridder: First Run

. This chapter is intended for Local Setups: an AudioGridder plugin coexists on the same system as CrossGridder.

Server Setup

. Install CrossOver 20 or 21

- . Extract CrossGridder with The Unarchiver o Keka.
- . Mojave > Monterey / Ubuntu Studio 21: install **Crossover 21**
- . Get the 14 days trial from their website
- . Open Crossover: Menu>Bottle>Import>CrossGridder_1.4.cxarchive
- . Recreate aliases (Documents, Music ...) with Wine Configuration.

. MacOS

- . Select **CrossGridder** from Crossover SideBar
- . Drag AudioGridderServer from Program List to Dock
- . Launch AudioGridderServer, wait for wine64-preloader
- . Quit AudioGridderServer; wine64-preloader remains active.

. Ubuntu Studio/Linux setup

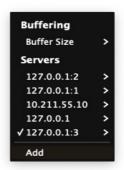
Check the tutorial on **CrossGridder's YouTube Channel**

- . Select CrossGridder from Crossover SideBar
- . Pin AudioGridderServer and System Monitor to Menu Bar
- . Open both, the server splash screen will be transparent.
- . Kill the AudioGridderServer process with \pm 25 RAM in use .

. Plugin setup

- . Open your DAW, create an empty project.
- . Create a midi track, insert an AudioGridder plugin.
- . Click the Net icon to reveal "Buffering" "Servers" and "Add".



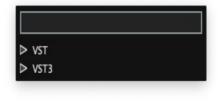


- . Change Buffer Size to 2 or more blocks
- . Click "Add", type 127.0.0.1 and "Add" once more.



. Click "+" to insert Windows VSTs.





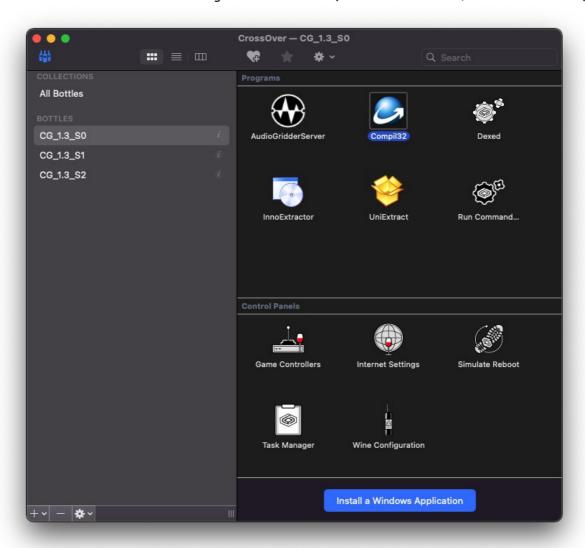


05. Multiple Servers Setup

- . There are at least two valid reasons to adopt this configuration:
 - . If one server freezes, only plugins from that server will freeze.
 - . Have as many GUIs as you like.
 - * Tip: Read it as 1 GUI x server, as many servers your system can support.
 - ** Tip: 4 Servers is a good starting point, more than 6 would mostly be not necessary.

Shared setup: first part

- 1. Open Crossover
- 2. **Create 2 CrossGridder copies** (right click bottle > Duplicate). Rename all bottles as you wish + ID (i.e CG_1.4_S0,CG_1.4_S1...)

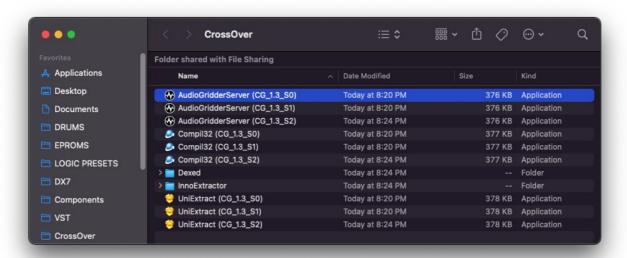


^{*} Tip: Don't run AG servers at same time before each one has its ID,

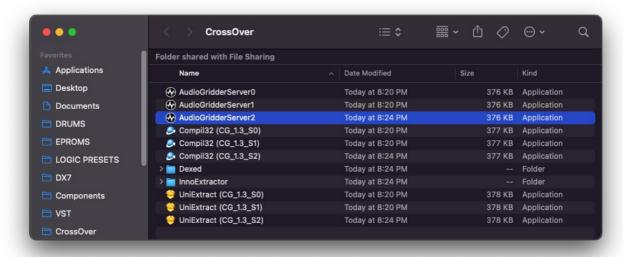
^{**} Tip: Advanced users can change server ID via AG server configs, it's faster. See Chapter 6.

. MacOS setup

1. Right click an app in Program List > Show in Finder.



2. Rename all AudioGridderServer apps adding their ID: AudioGridderServer0, AudioGridderServer1, etc..



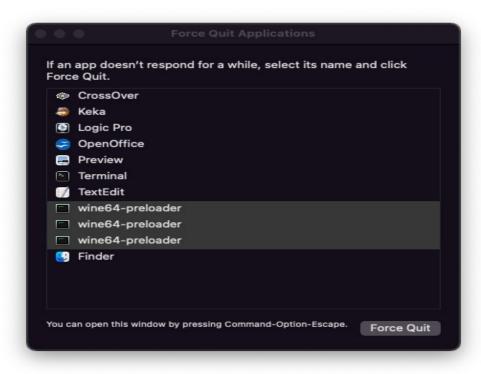
3. Drag them into the Dock



- 4. Launch the first server from the Dock
 - . Wait for the server splash screen
 - . Check that wine64-preloader is active in the Dock
 - . Quit AudioGridderServer(n) from the Dock
 - . Repeat the same steps for the remaining servers

* **Tip:** Only multiple wine64-preloader must run.

Any running AudioGridderServer leads to freezes.



. Ubuntu Studio 21 setup

Check the tutorial on the **CrossGridder's YouTube Channel**

- 1. Pin each AudioGridderServer from its CG bottle to the Menu bar, from left to right, from first to last, to identify them.
- **2**. Repeat these steps for each AudioGridderServer in the Menu bar:
 - . Launch the server
 - . Wait for the server splash screen, It will be transparent.
 - . Open System Monitor > Processes
 - . End the AudioGridderServer process using less RAM, ± 25 MB.
 - . The server splash screen is released and the server is ready.
 - . If not done, certain plugins will freeze when loading them.

Shared setup: final part

- . Open the DAW
- . Load the first AudioGridder plugin.
- . Server 0 is ready as 127.0.0.1 after the First Run.
- . Connect the plugin to the server if they aren't.
- . Load a Windows VST into the AudioGridder plugin.
- . Load the second AudioGridder plugin.
- . Click on "Add", type 127.0.0.1:1 then "Add" again.
- . Load a Windows VST into the AudioGridder plugin.

*Tip: Repeat this for any additional server, adding 1 to the last used ID.

06. AudioGridder General Settings

- . Screens with max res = 1366x768 cut the bottom of the AudioGridder server settings.
- . In this case, the following solutions can be adopted:
- connect to a second monitor with a min res of 1600x900
- manually modify settings while the AudioGridderServer is off:

c: drive/users/crossover/ApplicationData/AudioGridder/AudioGridderserver.cfg

```
"CrashReporting": false,
"ExcludePlugins": [],
"ID": 0,
"Logger": false,
"NAME": "CrossGridder",
"ParallelPluginLoad": false,
"PluginWindowsOnTop": false,
"SandboxLogAutoclean": true,
"Sandboxing": false,
"ScanForPlugins": true,
"ScreenCapturingFFmpeg": false,
"ScreenCapturingFFmpegEncoder": "webp",
"ScreenCapturingFFmpegOual": 1,
"ScreenCapturingOff": true,
"ScreenDiffDetection": false,
"ScreenLocalMode": true,
"ScreenQuality": 1.0,
"Tracer": false,
"VST": true,
"VST2": true,
"VST2Folders": [],
"VST3Folders": [],
"VSTNoStandardFolders": false
```

Default server settings *** Don't change them unless stated otherwise ***

. Server name

- . Default: Crossgridder
- . It can be changed to any other preferred name.

. Server ID

- . Default ID: 0
- . Use it as described at chapter 4 and 5

. Sandboxing

- . Default: Off
- . Leave it off on a Local Setup to prevent a plugin chain reaction.

. Screen Capturing

- . Disabled
- . Leave it disabled for the CrossGridder Local Setup to work.

. Local Mode

- . Default: On
- . On: GUI sent by server moves while moving its AG plugin.
- . **Off**: You can move the 2 windows independently.

. Keep Plugin Windows on Top

- . Default: Off
- . Can be turned **On** or **Off**. Self-explanatory.

. Allow Plugins to be loaded in parallel

- . Default: Off
- . Shouldn't be necessary for a Local Setup.

. Diagnostic settings

- . Default: Off
- . Keep them off and turn them on only for reproducible issues.

. AudioGridder Plugin settings

. Buffersize

. Never leave it at 0 blocks, set it al least to 2 on recent CPUs. CPU usage drops and doesn't badly affect the latency due to the nature of CrossGridder running on a Local Setup.

. Plugin AppTray

. Plugin app tray disabled > Show Monitor > Any DAW crashes

* Tip: Use it to provoke an immediate DAW quit if necessary. BEWARE!!!

. Need help to install the AudioGridder plugin on Linux? Take a look at chapter 07.3.

07. Problems Resolution

01. Server's freeze

. Abusing server restarts while composing could freeze it.

Solution: force quit its wine64-preload, simulate windows reboot from within the bottle containing the frozen server to restart it.

. The server icon doesn't go away after force quit wine-64 preloader

Solution: Kill any **wine*** process.

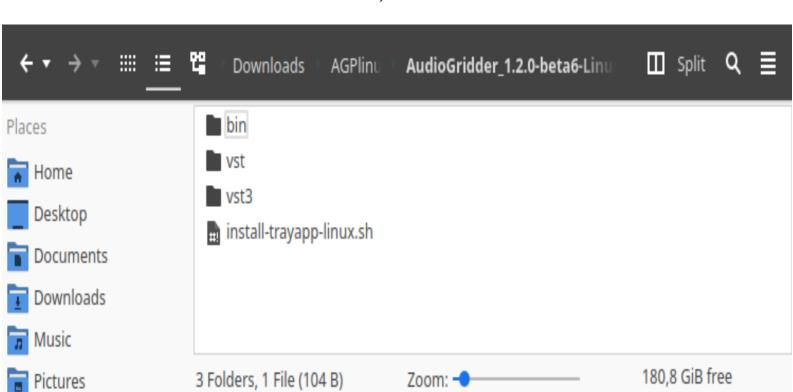
In any case, it's difficult to reproduce the issue unless stressing the servers with frequent restarts while connected to the AudioGridder plugin.

02. Windows installer can't create a folder and fails

Solution: Recreate aliases with Wine Configuration.

03. AudioGridderPlugin – Linux Installation

- . Download AG plugin for Linux and extract it. Be sure that the plugin and server versions are matching.
- . In this example we create the folder AGPLinux into Ubuntu Downloads, where we move the extracted folder, which contains:



.Let's install the tray app first:

* **Tip:** Following instructions are based on the previously created folders.

- . Open Konsole (Ubuntu terminal)
- . Copy and paste (change <user>):

cd /home/<user>/Downloads/AGPlinux/AudioGridder_1.2.0-beta6-Linux

- . Press Enter
- . Copy and paste (change <user>):

sudo /home/<user>/Downloads/AGPlinux/AudioGridder_1.2.0-beta6-Linux/install-trayapp-linux.sh

- . Press Enter, type system password, press Enter. Done!
- . Now install the AudioGridder plugin:
- 1) Choose A or B:
 - A) Move the AudioGridder VST2 and VST3 into VST system folders.
 - B) Add the path to the extracted folder into your DAW.
- 2) Open your DAW, create a track, insert an AudioGridder plugin. Done!

How to remove the tray-app, if required.

- . Open Konsole
- . Repeat the following for each sudo command below:
 - . Copy and paste into Konsole
 - . Press Enter
 - . Type the system password
 - . Press Enter

sudo rm /usr/local/bin/crashpad_handler

sudo rm /usr/local/bin/AudioGridderPluginTray

08. Suggestions, Ideas, Reporting Issues

- . Start a discussion on my Github page including:
 - . System's details
 - . CrossGridder build in use
 - . The part of the guide requiring clarification or a description of the issue when not discussed here directly.
- . Send detailed reports and constructive feedbacks:
 - . They will have a higher priority.

09. Credits

- . AudioGridder by Andreas Pohl/e47
- . **Codeweavers** for Crossover. It's necessary to run CrossGridder
- . <u>Inno Setup</u> by Jordan Russell
- . $\underline{\mathbf{Me}}$, for the countless spent testing it.
- . You, for trying CrossGridder...
- ... Consider buying their products or donate if the software is free.