
Gimbal Studio

Release 5.42.3

Embention

2023-05-24

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INTRODUCTION

Veronte Gimbal Studio (VGS) is a program that will reestream the SLA video and it will be able to control the gimbal through the Veronte.

INSTALLATION

Different installers appear in the compressed file, all of them are necessary for the VGS to work correctly.

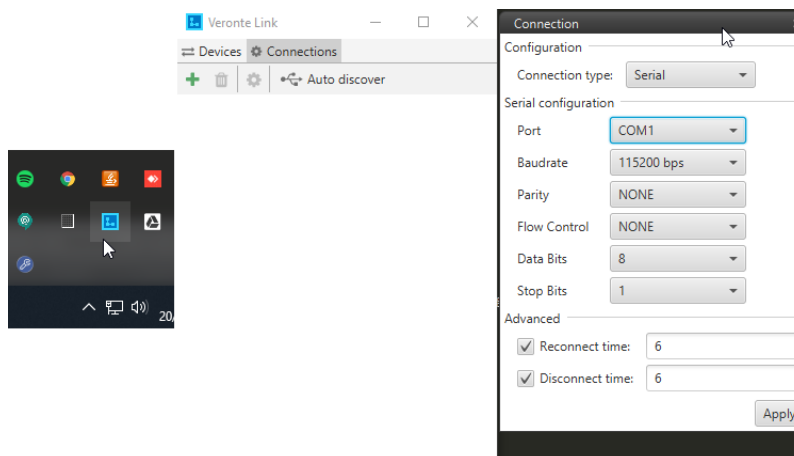
- **gstreamer-1.0-mingw-x86_64-1.16.2.msi:** this library helps VGS to restreaming the SLA video to the browser. To install this program it is very important that when this installer request the user what type of installation want, the user selects “Complete”.

Once installed, check that in the path of the user’s environment variables appears the next route: “*C:gstreamer1.0x86_64bin*”. If this path isn’t added with the installer it will have to be written, without this path VGS doesn’t work.

- **VeronteLink:** the role of this program is that both Pipe and VGS will be able to see and work with Veronte at same time. This program is installed as a Windows service, it will initiate always with the PC and never ends unless the user makes. When this service is installed, it will appear in the Windows toolbar as a service.

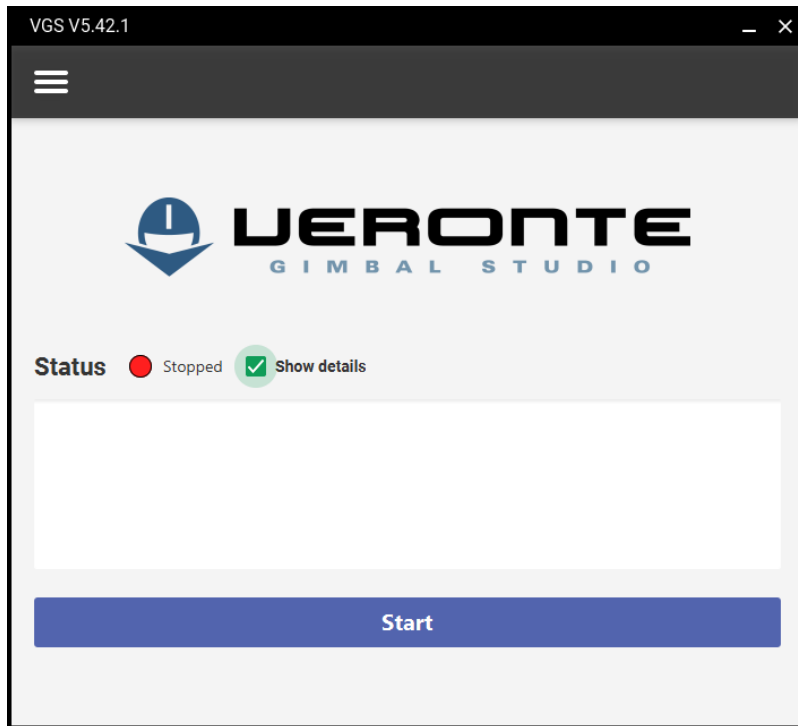
To configure the COMs of the PC, the user must double click on the program icon, the user can configure in the same way as in Pipe. Once make that, the user must remove the COM of the Pipe, VeronteLink will replace to Pipe in this work.

Once the COM is set to VeronteLink, Veronte should show up in Pipe even if the COM is removed from Pipe preferences.



VeronteLink app

- **VeronteGimbalStudio:** This program is that the user will start every time he wants to work with VGS.



VGS

SLA PREPARATION

The SLA configuration is very important, because this could cause the program doesn't work.

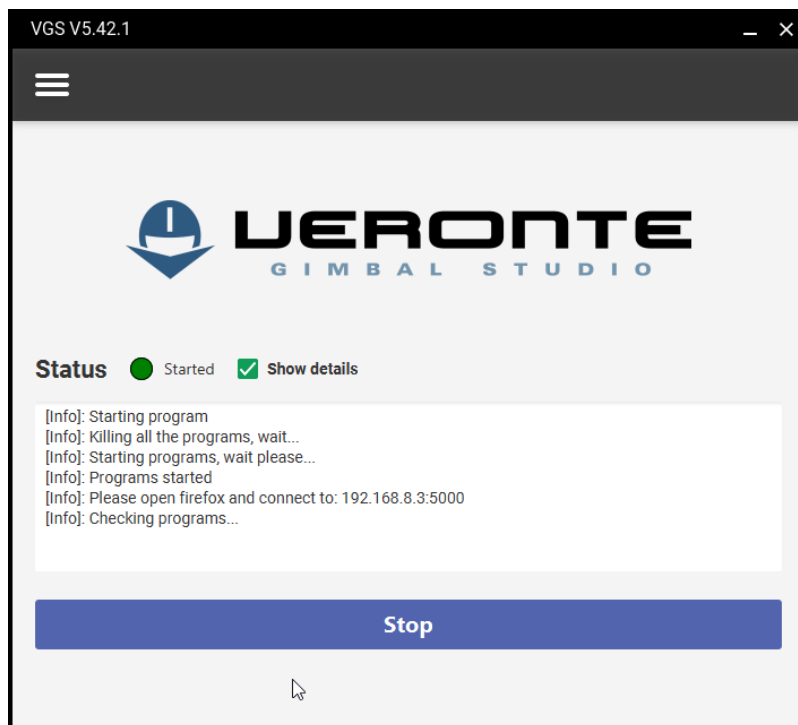
Warning: In the Compression tab, the user must select the "RTP H264" option, select unicast and select port 15004 for the EO camera. For the IR camera it will be the same configuration but with port 15006.

In the next versions that options may be configurables, but for now this options are important for VGS to work correctly.

VERONTE GIMBAL STUDIO

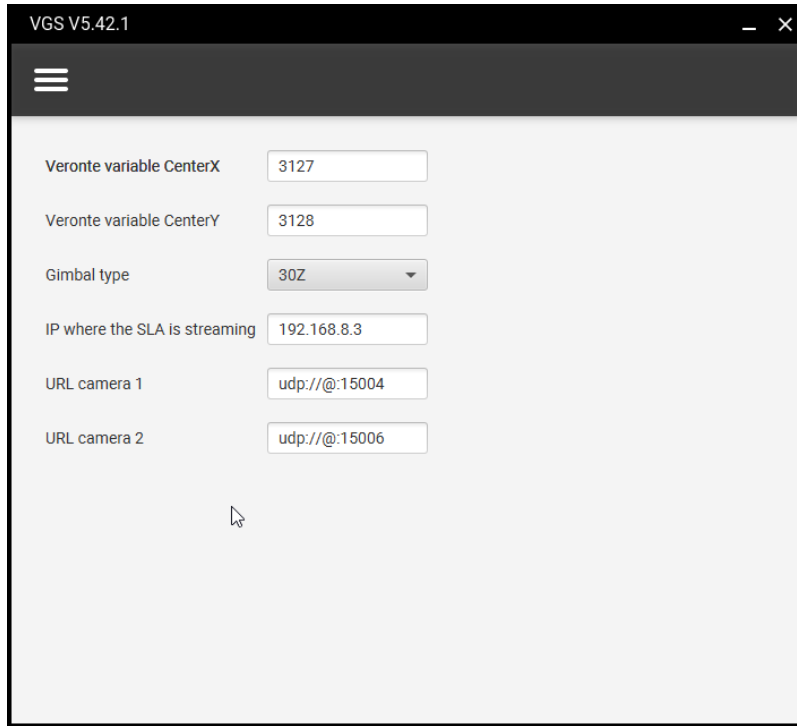
4.1 VGS

With this program the user can configure all the parameters that the program needs and the video configuration. In the Home tab we can start/stop the programs, with the details displayed, the user can see some usefull information about the program.



Home tab

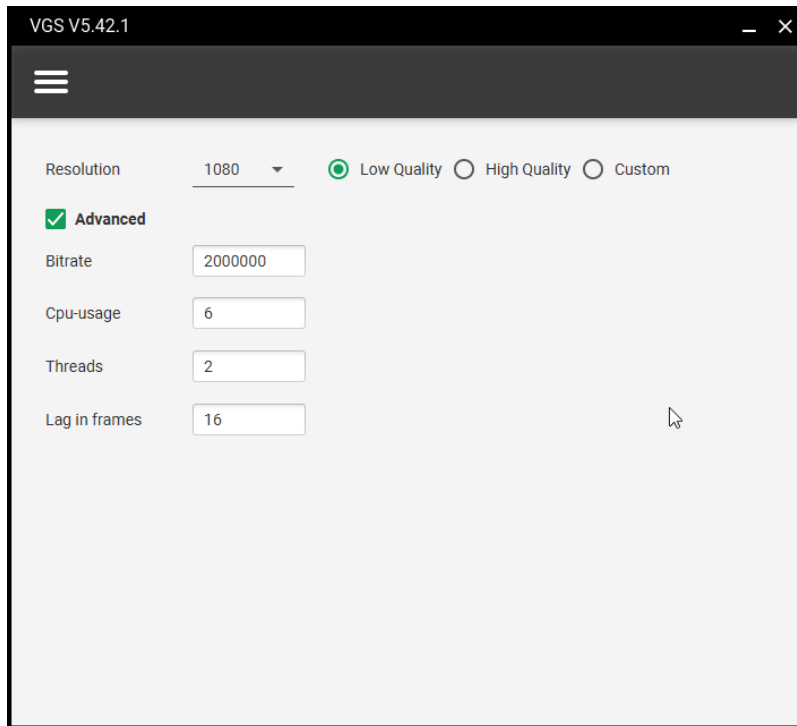
In the configuration tab the user must configure some important things to the correct operation of VGS.



Configuration tab

- **Veronte variables Center:** User Variable used by Veronte to track the center of the image.
- **Gimbal type:** Gimbal used.
- **IP where the SLA is streaming:** The IP that the user has put in the SLA program. This parameter is important to work without internet.
- **URL cameras:** URLs to connect with cameras. The port is important for the correct operation of VGS.

And in the video tab the user can change some parameters to configure the video.



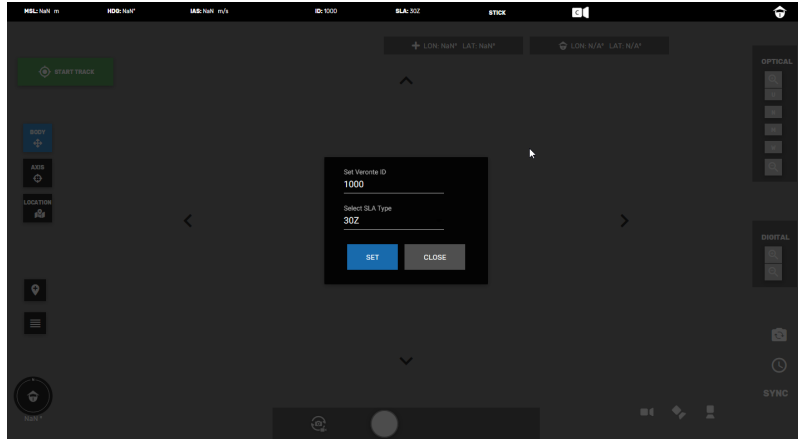
Video tab

- **Resolution:** The user can choose between 1080 and 720
- **Quality:** The user can choose any quality preset, this selection changes the advanced parameters. High quality is recommended for powerfull CPUs.
- **Bitrate:** The larger this number the better the quality, but the bigger the output file size, so it will make the CPU work harder. Supported values: [0 - 2147483647]
- **Cpu-usage:** This parameter controls the %cpu target as follows:

$$target\ cpu\ utilisation = (100 * (16 - cpu-used) / 16) \%$$
 Supported values: [0 - 16]
- **Threads:** This parameter determines the number of threads that will be allocated to the encode process, it is recommended put the same one that your CPU has. Supported values: [0 - 64]
- **Lag in frames:** This parameter defines an upper limit on the number of frames into the future that the encoder can look. Supported values: [0 - 25]

4.2 Browser

Once the VGS program is started, the user only have to open a Firefox browser to work.

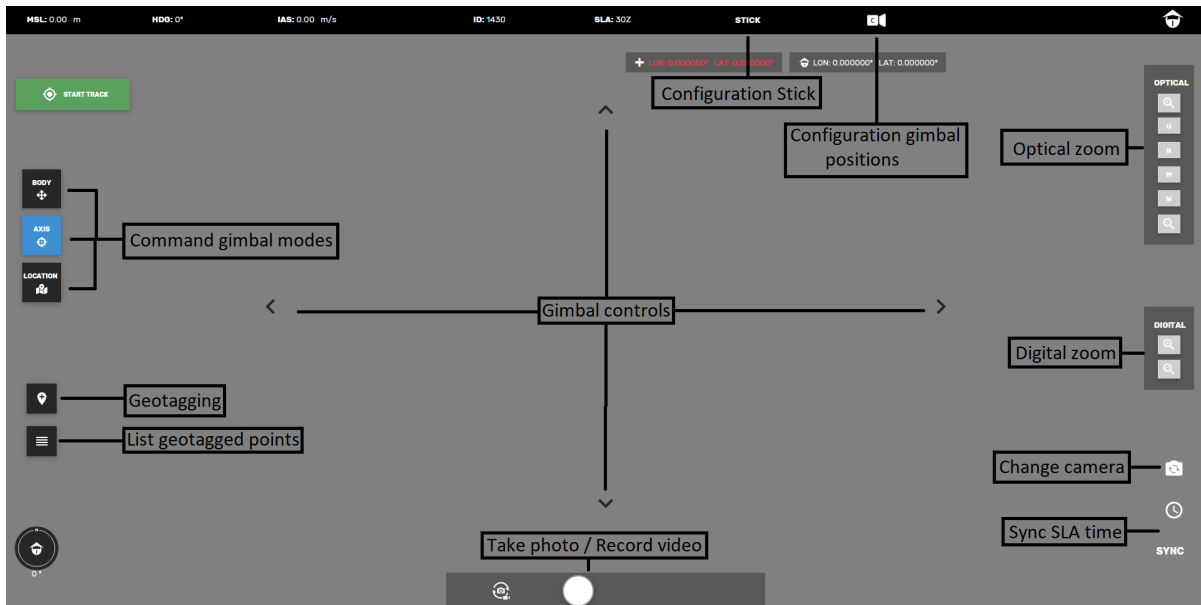


Browser init

After the user enters the Veronte ID and the SLA type, he can press to SET button. If everything works correctly the background image appears in grey for a few seconds, and if everything is connected correctly and the Veronte ID is correct and turned on, the grey background changes to the camera image.

Waiting time changes with the PC CPU, for example with a Intel Core i7-8700K CPU @ 3.70GHz, the time is around of 5 seconds, and with a Intel Core i7-7500 CPU @ 2.70GHz is around 15-20 seconds.

Note: The user should keep in mind that this program always works better when he works with a more powerful CPU.



VGS.

TROUBLESHOOTING

Some common troubles, please, if you have any other problem, contact with support.

I cannot see the image

Review all SLA and VGS settings.

- In the SLA Panel you have to put the option rtp h264, and your IP address in the text box as is indicate in the chapter 2.
- Make sure that in VGS, in the configuration tab the same IP address is written as in the SLA panel.
- If you don't have an internet connection, make sure your browser's URL has your IP address, for example: 192.168.8.3:5000
- You need java 1.8 64 bits installed.

I see cuts on video

Check the Video tab in VGS, maybe you need to adjust the parameters or resolution to your CPU.

I put the Veronte's ID in the browser but nothing happens

If this is the first time you connect this Veronte to VGS, maybe it may take a few minutes as it happens in Pipe, if after a few minutes you see the same result, make sure that you can see the Veronte in VeronteLink and in Pipe.

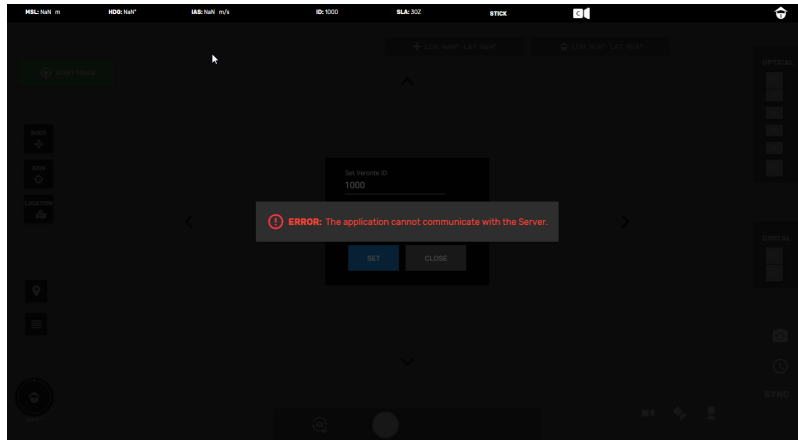
Geotagging isn't working

Remember that Veronte needs to calculate that some important things: * AGL correct, you can check this value in Pipe. * You need to place the mesh at Veronte position with Pipe, VGS needs the terrain information to calculate the geotagging data.

I update the Verontes and VGS doesn't work anymore

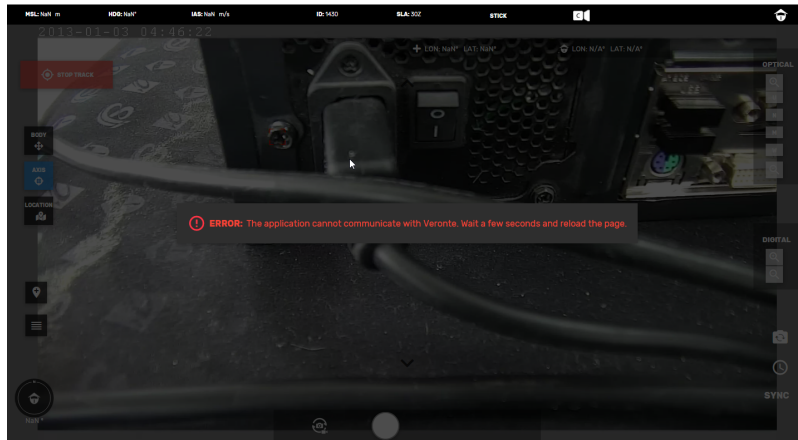
Remember that VGS works like Pipe with Veronte, so you need the same version in VGS and Veronte.

I see some errors in the browser



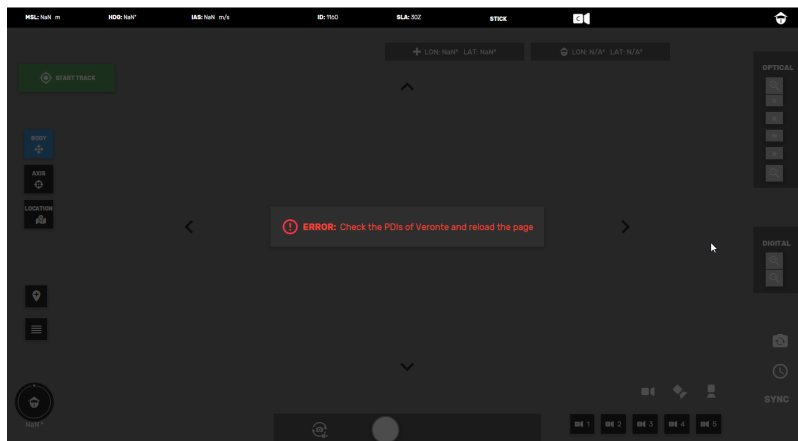
VGS

This error indicates that there is an error with the communication with the server, please, try to restart the VGS.



VGS

This error indicates that there is something wrong with the communication with Veronte, please, make sure you can see it in VeronteLink and restart the browser.



VGS

This error indicates that the PDIs saved on Veronte do not have the necessary messages to communicate with the SLA.