ZScore User Guide

For *Vexilla*

This guide explains basic ZScore system features, such as the score loading and playing.

For more advanced features please contact the author via email slavko@zagorac.com

ZScore feature explanations were correct at the time of writing (Jun 2023).

Download

Use the URL below to download ZScore package for the *Vexilla* score:

https://bit.ly/zspackvexilla

Package Content

The package contains following directories:

- scores (score data)
- zscore (application data)

Installation

ZScore software can be run on any desktop operating system, providing that the third-party software dependencies outlined below are correctly installed.

Required third-party software

Java	ZScore GUI and server require Java jdk 1.8 (Java SE Development Kit) which can be installed from: https://www.oracle.com/java/technologies/javase/javase8u211-later-archive-downloads.html Once jdk is installed, please check that that the installation is valid (version check is good enough): https://www.baeldung.com/java-check-is-installed
Inscore	ZScore Vexilla utilises standalone application **INscore Viewer** v1.21 The application can be downloaded and installed from: https://inscore.grame.fr/
ZScore	Download and unzip zscoreVexilla.zip into any directory That directory is referred to as <installDir> in this document

How to run ZScore

Navigate to the directory where ZScore packages were unzipped (<installDir>), either through the computer's file system browser (Finder, Windows explorer...) or via a command line.

Run integrated ZScore application (GUI + Server)

Go to the "zscore" directory (<installDir>/zscore).

On MacOS	double click **zscore.command** **or** execute the command line script: ./zscore.sh TIP: If you get macOS unidentified developer warning: right click on zscore.command→ select Open → click Open button.
On Linux	execute the command line script: **./zscore.sh** TIP: works on any Unix OS flavour
On Windows	double click **zscore.bat** **or** execute it from the command line. TIP: If you get Windows Defender blue window warning: click on More Info → Run Anyway.

The script execution above should open a new terminal window containing a startup log.

TIP: **Do not close this window** as it will terminate the application.

The ZScore GUI should appear after a while, if everything is ok.

Figure 15 illustrates what the ZScore GUI should look like.

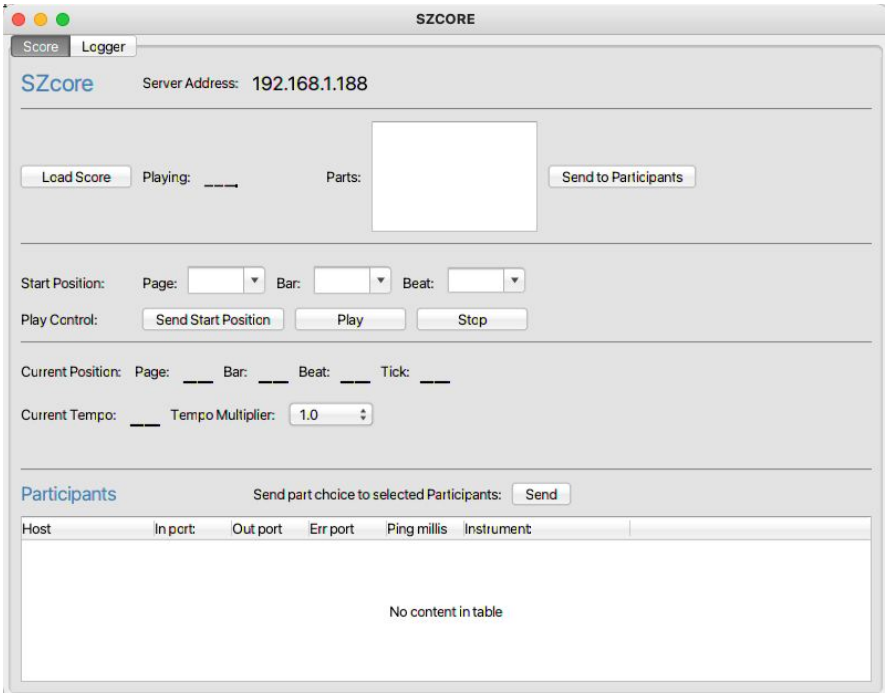

Figure 1: ZScore performance control GUI

TIP: If this does not happen, or in case of any other issues, please check for any errors in the log file (szcoreApp.log).

The log file should be available in “zscore” directory (<installDir>/zscore), or in whatever directory the app was started from.

Load Score

In the ZScore GUI, click the “Load Score” button available in the top left corner.

Navigate to the installed “scores” directory and find the required composition subdirectory:

<installDir>/scores/vexilla/rsrc/

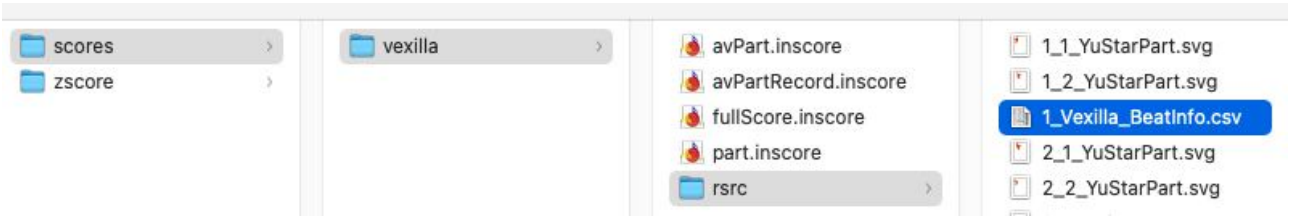

Figure 2: Vexilla score directory

Select and open file 1_Vexilla_BeatInfo.csv

TIP: Required BeatInfo file should be near the top of the list if the file browser view is sorted by Name.

If the score load was successful, ZScore GUI should display the available parts and composition name as shown in Figure 3.

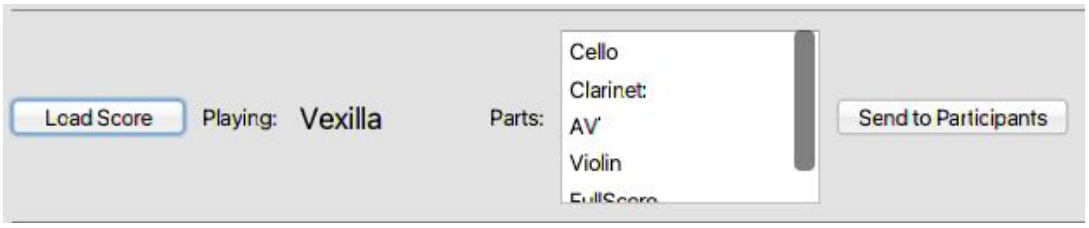

Figure 3: Successfully loaded score

TIP: You can resize GUI as required by dragging its corners.

Inscore View

Start INscore standalone application. It should open as an empty window.

Drag and drop the appropriate *.inscore file into the opened INscore Viewer application window.

The files are stored in the installation directory:

<installDir>/scores/vexilla/

as illustrated in Figure 4.

Figure 4: Vexilla INscore files

The files used in Vexilla are:

part.inscore Creates Instrument part with horizontal alternating pane layout

fullScore.inscore Creates Full score with vertical alternating pane layout

avPart.inscore Used for audience visualisations

Figure 5 illustrates the instrument part view created by the part.inscore file.

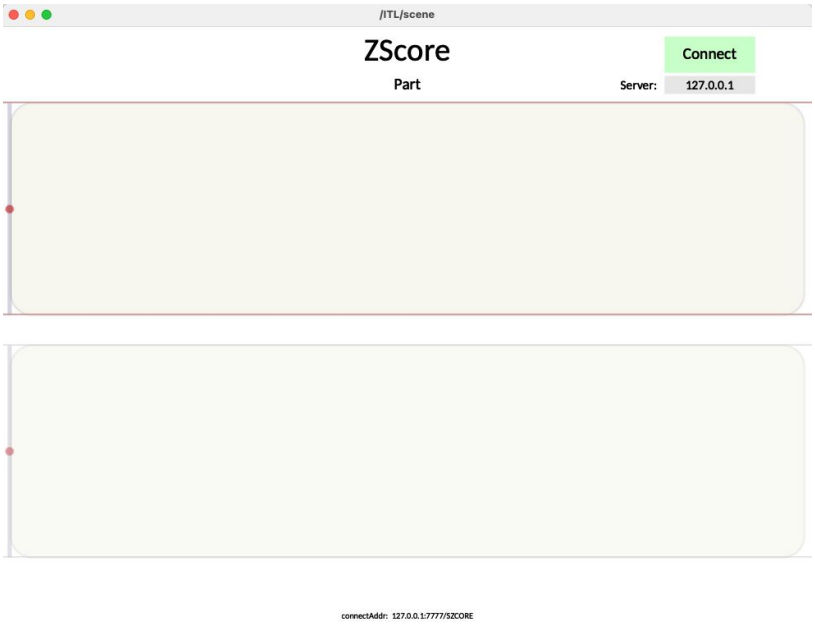

Figure 5: Inscore part view

Figure 5 illustrates the full score view created by the fullScore.inscore file.

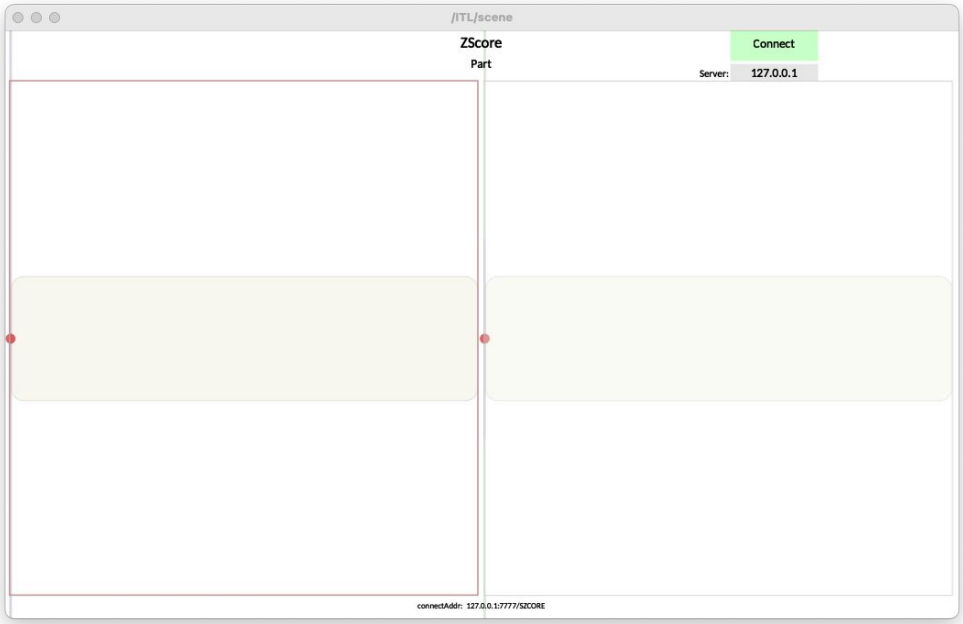

Figure 6: INscore Full Score view

Connect INScore client

Note the IP address displayed in the top right corner nest to “Server:” label (Figure 7).

Figure 7: Server address

If the ZScore GUI **is running on the same host** as the INscore client no changes are necessary

If the ZScore GUI is **not running on the same host** as the INscore client, please note the IP address displayed at the top of the ZScore GUI, illustrated in Figure 8, and modify INscore value as described below.

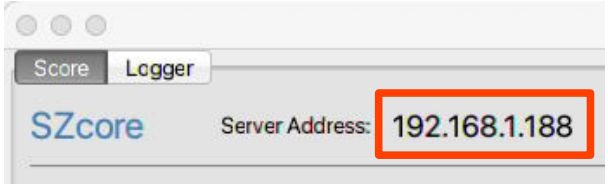

Figure 8: ZScore server address

To change the IP address in the INScore viewer, **double click** the address shown in Figure 7.

This action should open the properties window illustrated in Figure 9

Figure 9: INscore properties window

Change the IP address visible in the top line, e.g.:

`/ITL/scene/serverAddr set txt "127.0.0.1";`

to be the same as the value displayed in the ZScore GUI, e.g:

`/ITL/scene/serverAddr set txt "192.168.1.188";`

and click OK. The new value should be displayed in INscore.

Once the IP address in INscore viewer is set correctly,

click the **Connect** button illustrated in Figure 7.

If the connection is successful the Server label should become green and the client should be visible in the Participants list of the ZScore GUI.

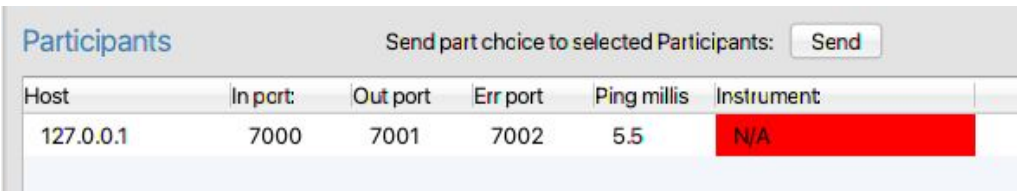

Figure 10: ZScore Participants list

Part Selection

Once all clients are connected, click **Send To Participants** button in the ZScore GUI, highlighted in Figure 11.

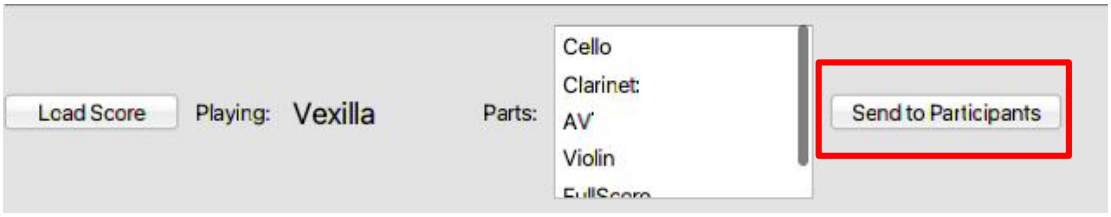

Figure 11: ZScore send to participants button

A list of the available parts should be listed on all connected INscore clients as illustrated in Figure 12.

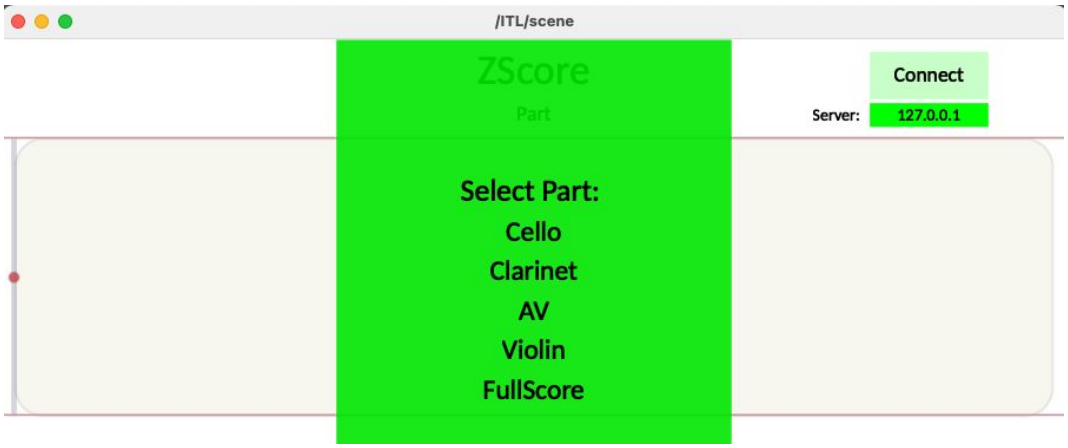

Figure 12: Part selection

Select the required part.

The selected part should now be registered in the Participants list within ZScore GUI as illustrated in Figure 13.

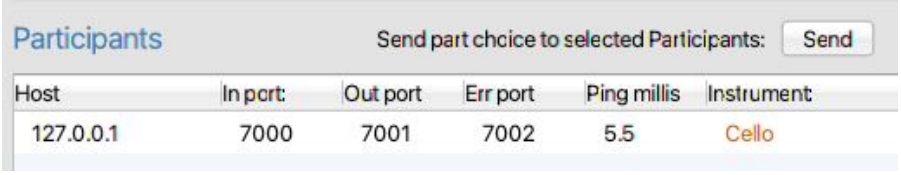

Figure 13: Part Registration

TIP: Always select FullScore if fullScore.inscore file is loaded and AV if avPart.inscore file is loaded.

TIP: Use the **Send to Participants** button every time a new *.inscore file is loaded into INscore Viewer to register part change.

Play Score

Once all required parts are connected, click the “Send Start Position” button in the ZScore GUI, highlighted in Figure 14.

Figure 14: Send Start Position

TIP: Always use “Send Start Position” before “Play”.

It is possible to change the start Page, Bar or Beat to any required value before sending the start position (Figure 14).

The selected Page should now be visible in the INscore viewer. Figure 15 shows the first page of the *Vexilla* score Cello part.

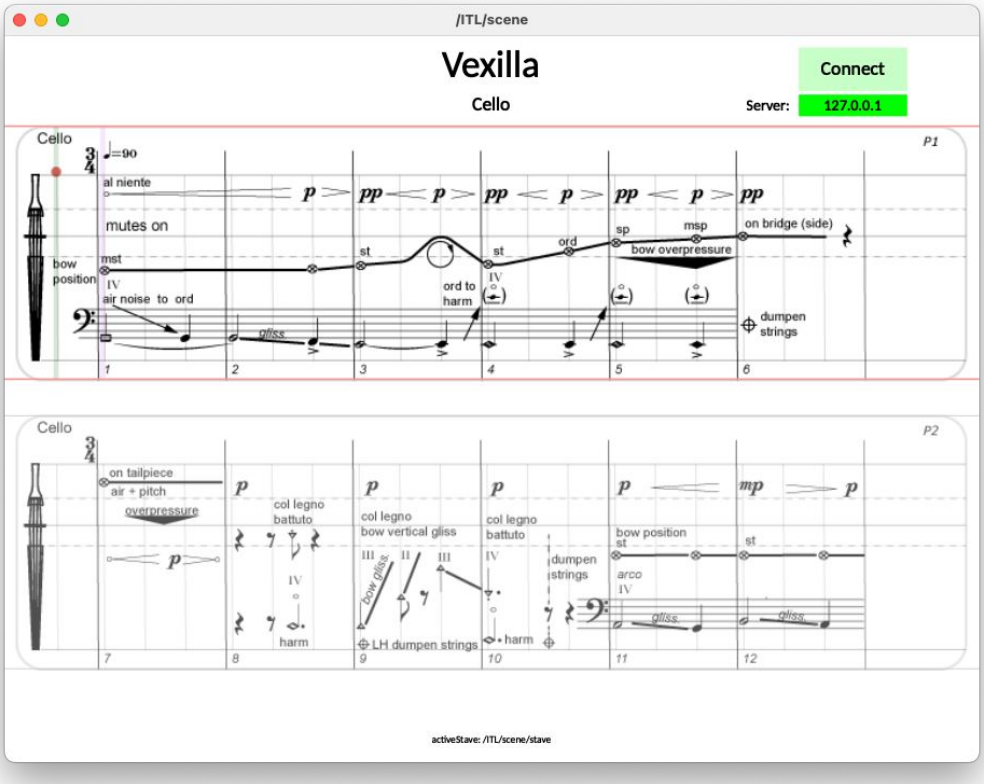

Figure 15: Vexilla, Cello part, first page

Click the “Play” button in the ZScore GUI to start the score (Figure 14).

The semaphore in the top left corner of the web score should count down to the performance start.

Once the score is started, the position line will move to indicate current position in the score. Also, the bouncing ball on the top of the stave will indicate current tempo.

The score layout consists of two staves (top and bottom). One is always active (currently played) and the other one is preparatory (showing the upcoming notation).

Play starts from the beginning of the top stave and continues to the bottom stave. Once the bottom stave is completed, play continues from the beginning of the top stave.

To stop play click on the red “Stop” button in the ZScore GUI (Figure 14).

To replay the score please repeat the sequence **“Send Start Position” → “Play” → “Stop”**

Audience Score View

To view the Audience score view in *Vexilla*, drag and drop **avPart.inscore** into INscore viewer.

Use the same procedure to select AV part and Connect as described above.

The initial view is illustrated in Figure 16.

Figure 16: Vexilla AV part view

To view the headless window, double click the grey dot in the bottom left corner, highlighted in Figure 16. Another double click brings the headers back.

Once the score is started, as described above, the AV part view should display audience score visualisations. In a performance venue, the AV part is displayed on a large canvas.