

## GSE Getting Started

Product:	Guiliani Streaming Editor (GSE)
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## 1. Introduction

This document explains how to open and run a first example program. If you are interested in creating a new GSE project from scratch, you can find the tutorial video “Guiliani Stream Editor or UI Editor” on [www.youtube.com](https://www.youtube.com)

## 2. Unzip and install

### ○ Win32

After unzipping the downloaded SDK into a folder you will find the pre-compiled GSE as “GSE.exe” in the subfolder “GSE”. Just double click onto it to start.

### ○ Linux

Prerequisites:

The GSE requires SDL\_mixer to be present in the system library search path.

After unzipping the downloaded SDK into a folder you will find the pre-compiled GSE-binary. Just double click onto it to start.

For using GSE in a Linux environment the following packages are required:

1. libsdl2-2.0-0  
\$sudo apt install libsdl2-2.0-0
2. libsdl2-mixer-2.0-0  
\$ sudo apt install libsdl2-mixer-2.0-0
3. libpng16-16  
\$ sudo apt install libpng16-16

*On the first start of the GSE a warning will appear in the console-window that the window settings could not be loaded. This is normal.*

### 3. Open a project

To open a project, choose File/Open Project (<Ctrl> + <o>).

**Example:** Open the “EditorDemo” project by choosing the folder “examples/EditorDemo” and select “EditorDemo.gpr” (from the folder “240x320” or “480x640”). After opening the project, the GSE will present the EditorDemo (see picture below).



Fig. 1 Editor Demo

### 4. Run simulation (testing a project)

To run the loaded project, select “File/Run simulation” (Hotkey <Ctrl> + <r>) from the menu. When you click onto the “run” button, your project will be opened in a separate window.

Note: Your project will be stored in the project’s “/temp” subfolder, where the main-executable of your application is placed.

## 5. Edit example project on the computer

- Execute the file *GSE.exe*, located in the GSE-folder. This will open the *Guiliani Streaming Editor* (Fig. 2).

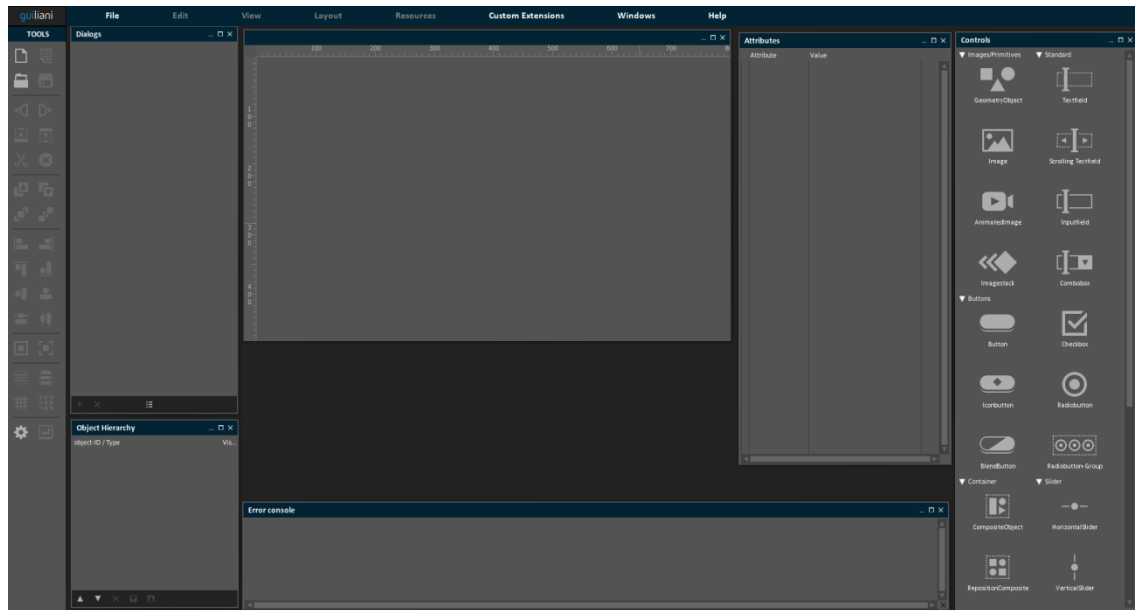
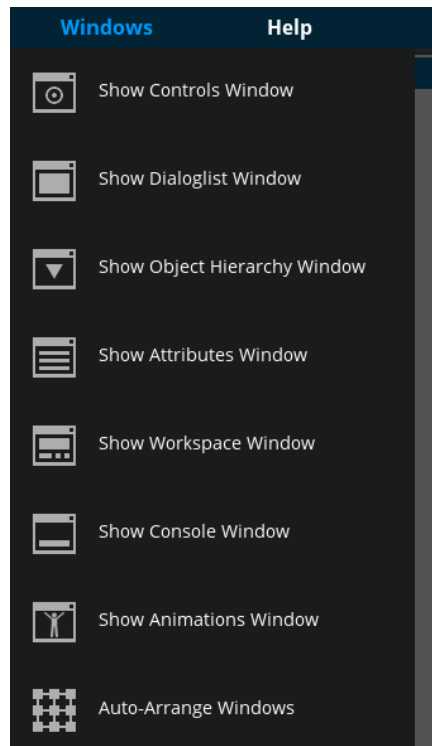


Fig. 2 Guiliani Streaming Editor

- If the shown windows are not automatically opened as shown in Fig. 2, please click on *Windows* and click on each of the options (Fig. 3).
- Additionally to that you can use the menu-item “Auto-Arrange Windows” to display all windows automatically arranged.



**Fig. 3 Windows Menu**

- Click on *File* → *Open project* (Fig. 4).

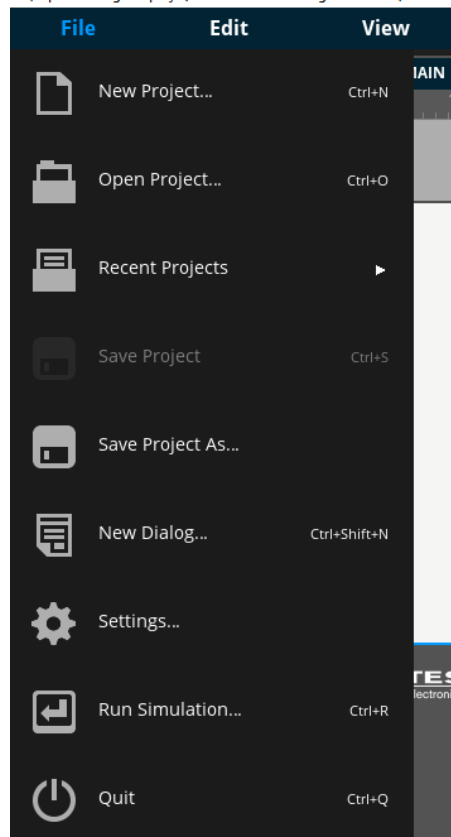
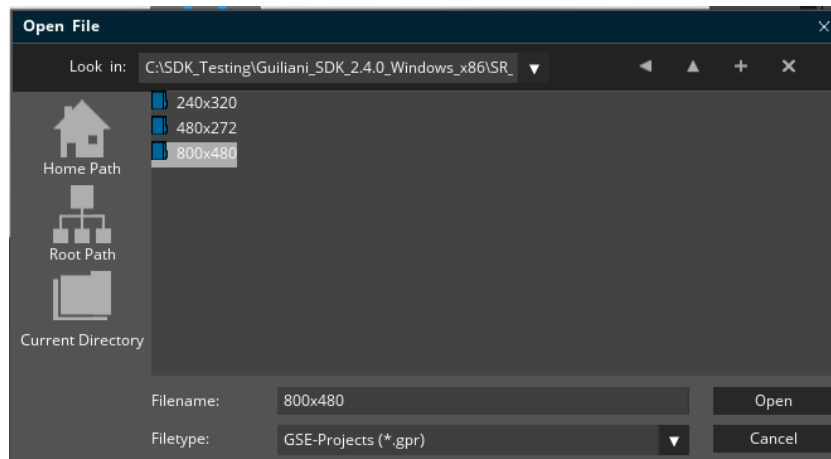
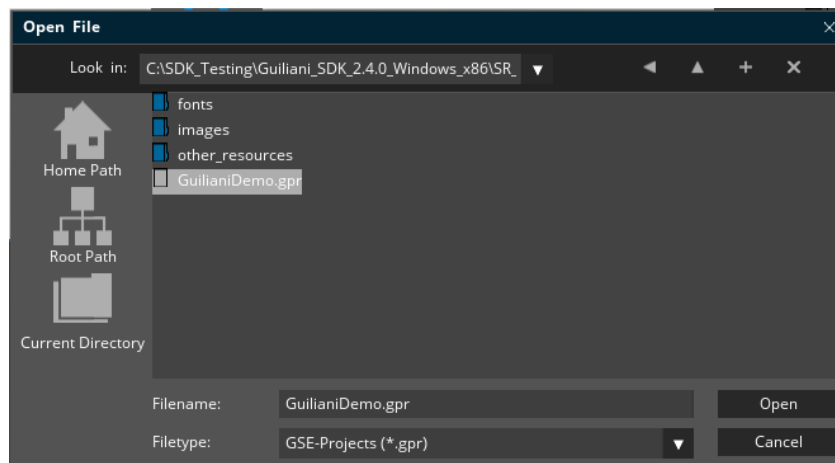


Fig. 4 Open project

- Find the folder where the SDK is located and open the folder GuilianiDemo inside SR\_GuilianiDemo.
- **NOTE: If the folder is not contained in the SDK you can download it from “guiliani.de Downloads/Demos” and unpack it into your SDK-folder.**
- Several different screen resolutions are available (Fig. 5). Depending upon the screen resolution, open the folder. Select the file *GuilianiDemo.gpr* (Fig. 6). Now the demo project is open and ready for being edited.



**Fig. 5** Screen resolutions for GuilianiDemo project



**Fig. 6** Open GuilianiDemo project

- Now we will add some functionality to the project:
- In the *Dialogs* window (Fig. 7), click on *Scratchpad*. It will open a nearly empty dialog, the Scratchpad (Fig. 8).

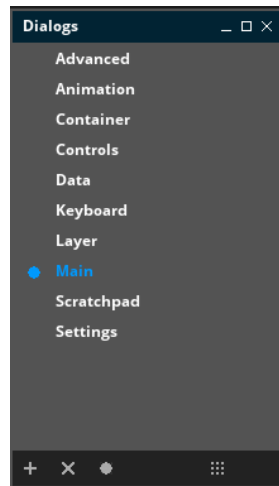


Fig. 7 Workspace window

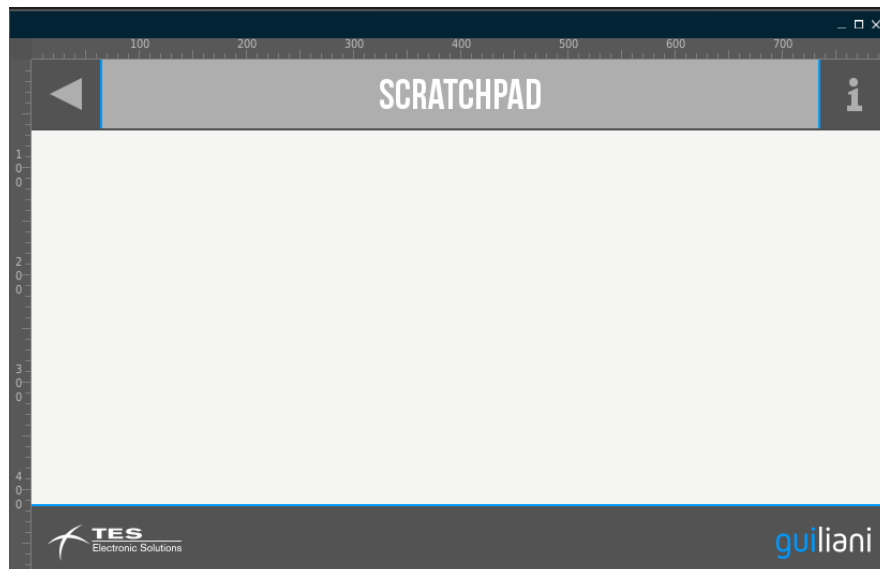
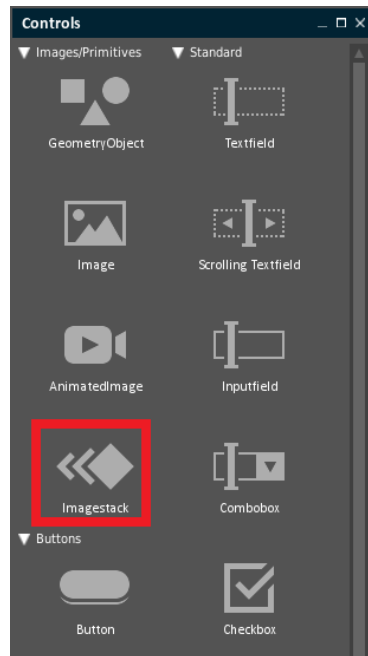


Fig. 8 Scratchpad dialog



- In the *Controls* window, click on the *Image stack* widget (Fig. 9).



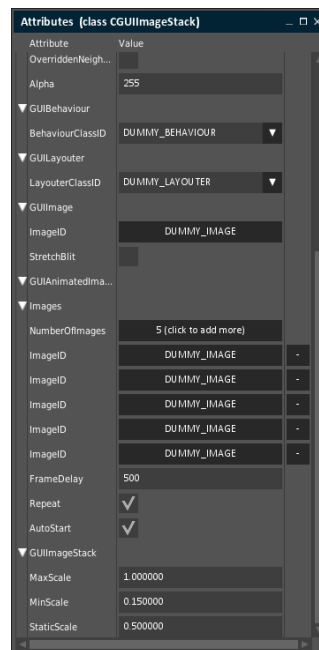
**Fig. 9** Controls window

- It will be included in the window, place it the center (by clicking and dragging) and resize it, by clicking and dragging one of the corners of the widget (Fig. 10).



**Fig. 10 Image stack widget**

- In the *Attributes* window, unfold Images and click on the button *NumberOfImages* until it reaches 5 (Fig. 11).



**Fig. 11 Adding image ID's**

- For each of the five buttons next to *ImageID*, click and choose an image from the *Image manager* window by double clicking (Fig. 12).

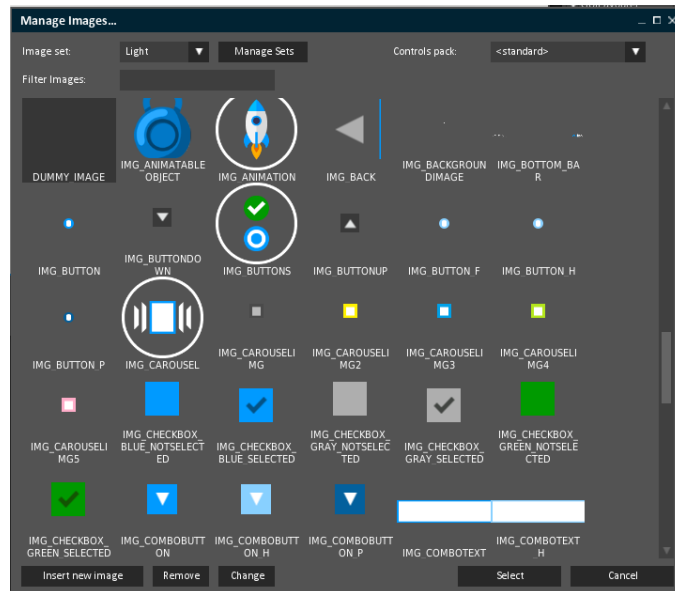


Fig. 12 Image manager window

- Save the changes in the project (Ctrl+S) and open the “Run Simulation”-window (Ctrl+R).
- Check if all options are set as shown and click on “Run”

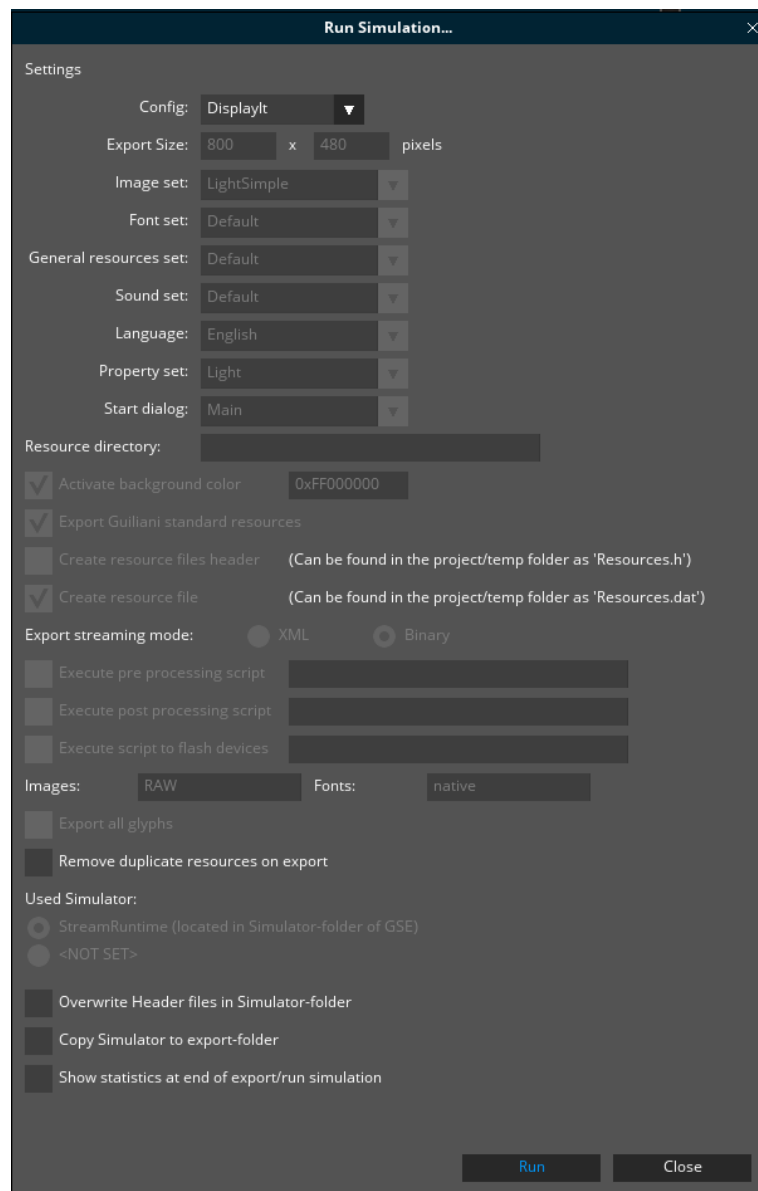


Fig. 13 Run simulation window

Note: to change any of the export-options go to the Settings-dialog and the “Export-Settings”-tab.

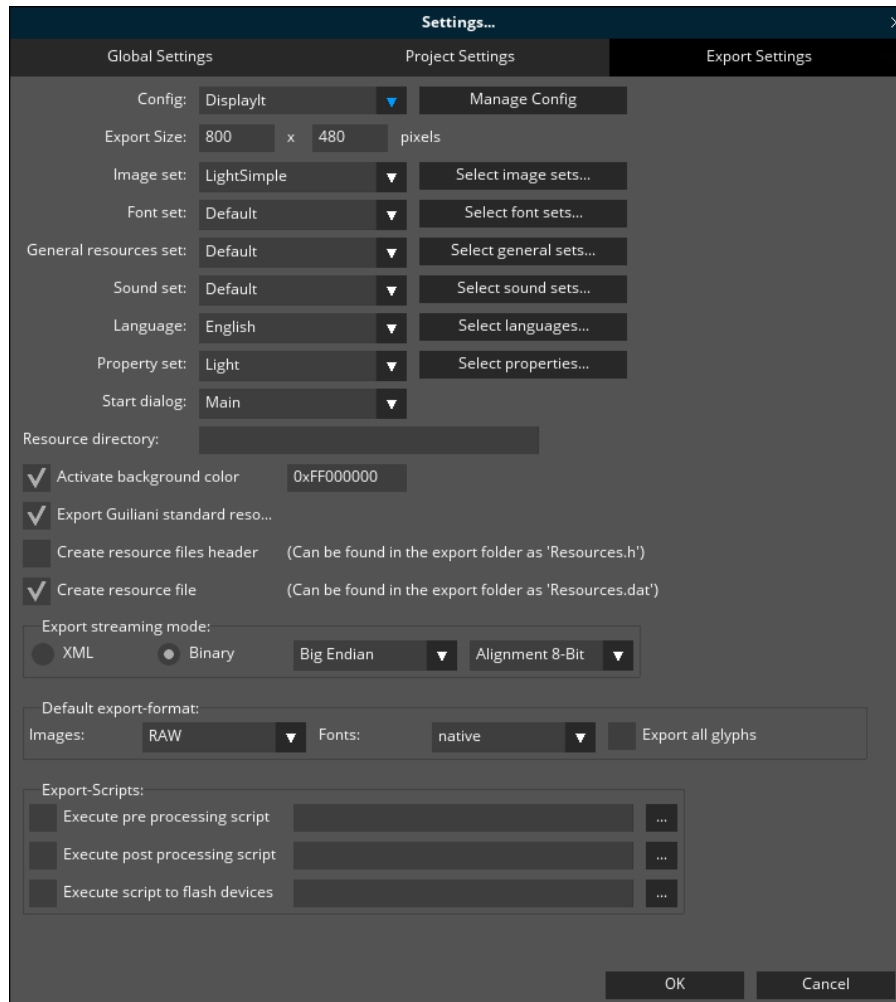
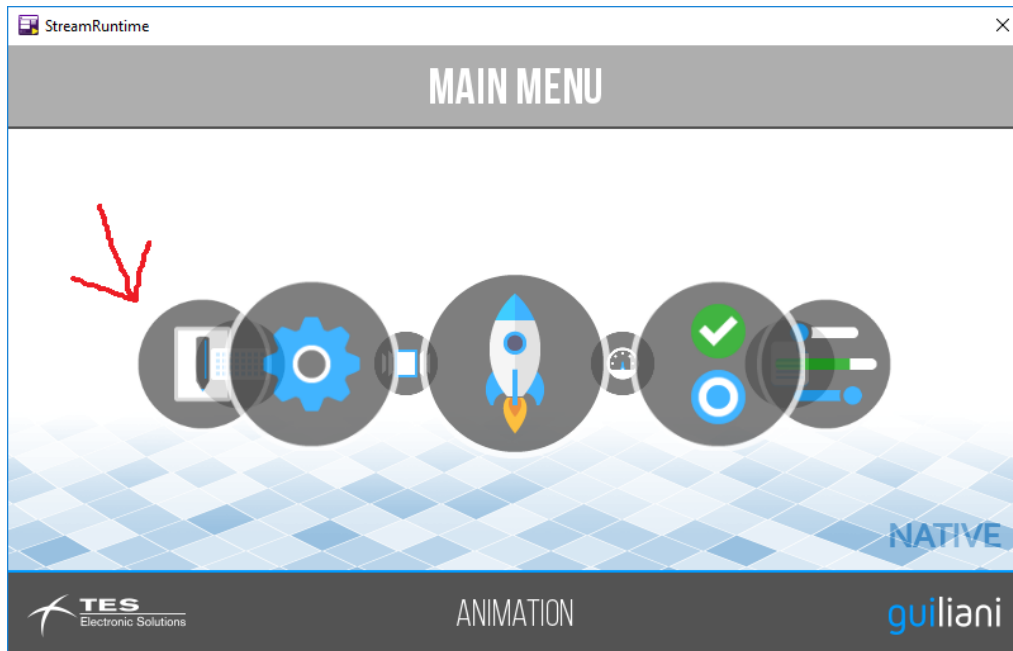


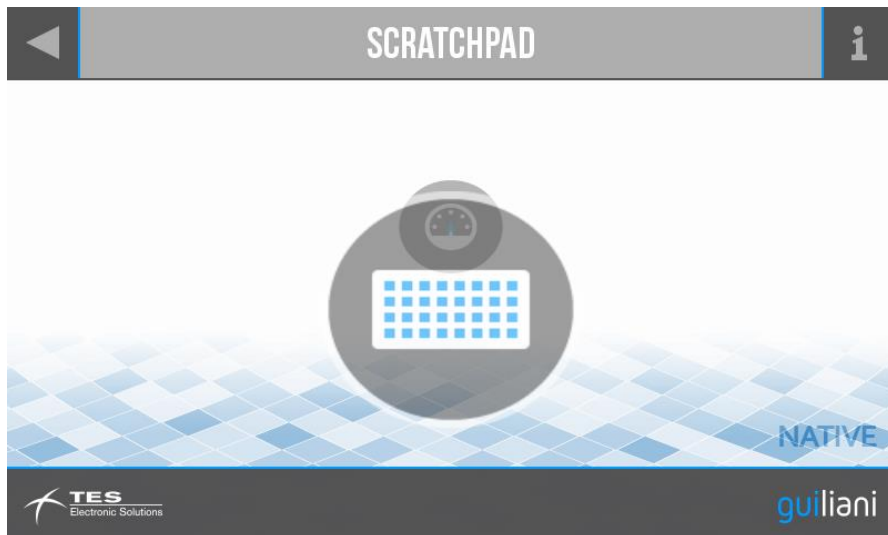
Fig. 14 Export-settings window

When the application has started you will see the main menu (Fig. 14). Scroll left or right to the *SCRATCHPAD* button (the “white rectangle with the pencil”), and click on it.



**Fig. 15 Simulation**

For visualizing the different images loaded, drag the image with the mouse up or down (Fig. 15).

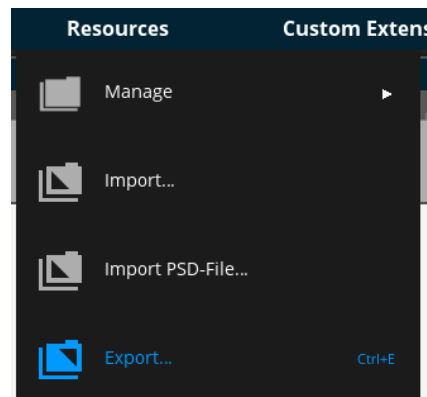


**Fig. 16 Image stack in movement**

- Stop the Simulator by clicking on the upper right corner of the Simulator Window frame.

## 6. Export a project

You can export your project (to let it run on the target board) by selecting Resources/Export from the menu (<Ctrl> + <e>) as marked in figure Export.



**Fig. 17 Export**



In the now opened window as shown in figure Export attributes, enter a valid path where your project should be saved. To select a folder, use the “...” button which will open the “folder dialog” window.

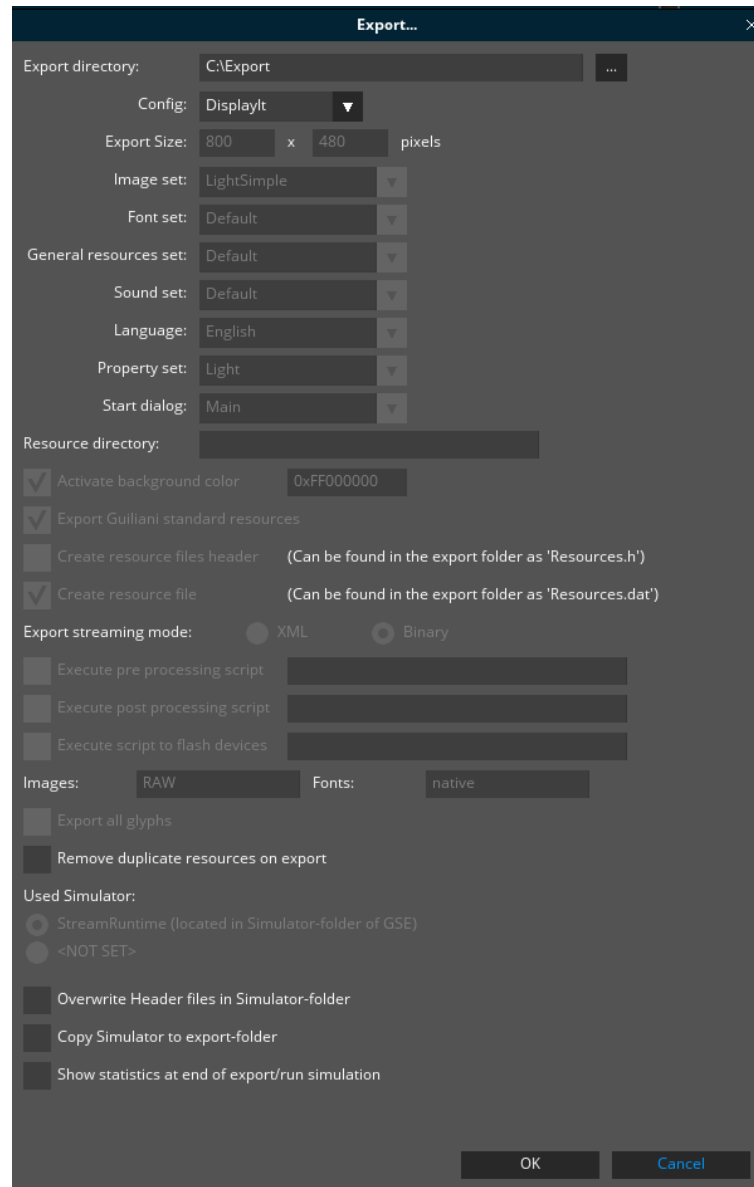


Fig. 18 Export attributes

By selecting “OK”, your project will be exported to the selected folder. This folder does now contain everything which is required to run your GUI.

## 7. Further documentation

- **GSE User Manual (Recommended)**

This document contains the main documentation for GSE, showing you how to create your own GUI.

- **GSE Control Attributes (For Reference)**

This document contains all Guiliani-controls which can be used in the GSE and lists their attributes and a short description.

- **Application Customization (For Advanced Users)**

In case you want to create your own GUI classes, this document describes how to compile the GSE and StreamRuntime and extend Guiliani with your own code. This also describes the various ways of binding application-code to the GUI and how interaction between the two is done.

- **License Compliance (For legal notice)**

Since GSE/Guiliani uses additional software components, this file contains the notes and information required by the respective licenses.