

## FxOptimizer quick guide

This is a simple script for speed up common operations with FumeFx, particles and Geometry .

FumeFx module are based on the “quick preset resolution” concept so when you are in the first steps with a lot of back and forth and values changes is very annoying open FumeFx dialog, set value, start simulation and so on. So i decided to speed up this operation with this script.

Geometry module are based on the same idea of the fumefx script. The idea comes when I worked with Thinking particles on personal project with a mesh that growth procedurally along a path. I noticed that with a thousand of polygons the simulation was so slow! Instead applying a geometry optimization modifier the simulation was much more fast and easy to work in realtime.

The script are based on 3 different modules.

Installation:

Method 1

- Run the script or drag into the viewport
- Go to customize user interface and find the “Raffx” category
- Chose the script and assign a keyboard shortcut
- Enjoy!

Method 2

- Run the script or drag into the viewport
- Go to customize user interface into “toolbars” tab
- Create a new toolbar or edit one
- Drag the script into the toolbar
- Enjoy!

UI:

FumeFx section

- Start/continue simulation button
- Pick source button
- Select source button
- Low, Mid, High resolution buttons
- Low, Mid, High resolution value spinners

Geometry section

- Pick source button
- Apply optimizer button
- Delete optimizer button
- Low, and High poly buttons
- Low and High poly resolution value spinners

Particle section

- Pick source button
- Particle viewport count spinner
- Particle render count spinner
- 1/2 and x2 divisor and multiplier button
- 1/10 and x10 divisor and multiplier button

How it works:

Pick a FumeFx source with *Pick source button* (rightclick to clear the selection). Set low, mid and high resolution values with *Low, Mid, High resolution value spinners* and press *Low, Mid or High resolution buttons*. There are 2 additional buttons to speed up the workflow, you can select quickly without searching in the scene the FumeFx grid with *Select source button(S)* and automatically will pop-up the interface. You can also running your simulation with *Start/continue simulation button (>)*, right click to start and left to continue simulation.

Pick any kind of geometry mesh with *Pick source button* (rightclick to clear the selection). Apply the modifier (ProOptimizer) with *Apply optimizer button*, set Low and High poly resolution values with *Low and High poly resolution value spinners* and press *Low, and High poly buttons*. You can also delete the modifier with *Delete optimizer button*.

Pick a Pflow source with *Pick source button* (right click to clear selection). Set viewport/render particle % quantity with *Particle viewport/render count spinners*. There are 2 additional button for speed up some operations. With  $\frac{1}{2}$  and  $\frac{1}{10}$  button you can quickly made half and 1/10 of the spinner value, right click for divide and left click for multiply.

Technical info

-The script are based only on picked object so select an object and press buttons isn't the right way!  
-1/2 and 1/10 buttons are simply divisor and multiplicator for the spinner value(only viewport spinner) so keep attention when you use in "multiplication mode" (left mouse click) it could increase esponentially the viewport count and max could freeze or crash. (a tip: you can divide your spinner value and with ONE left mouse click the spinner value is reset to the previous value)

Problem and know bug:

If modifier doesn't exist in the picked object's modifier stack it returns an error and script crash (only the script)

Solution:

Follow exactly the correct workflow so Apply mod first!!

Problem:

Geometry pick button can pick also particles sources and fumeFx grid due to the class of this objects.

Solution

Keep attention! Or the script could crash!

Quick tour on Vimeo:

<https://vimeo.com/102884841>

Feel free to contact me for any kind of problem at: [pioraffaelefina@outlook.it](mailto:pioraffaelefina@outlook.it)

Enjoy!