Introduction

Desktop application "Algorithm testing" is for the testing of compression algorithms with specified metrics and on specified objects. Results (graphs and tables) can be examined in the WEB application (link might change eventually).

Upload

Algorithms, metrics and objects must be uploaded to the desktop application in order to test them. All 3 categories are uploaded as a folder. Object folder must include one (or more for dynamic objects) .obj file and the folder must have same name as .obj file (not necessary for dynamic objects). Metric folder must include all necessary files for proper functioning of metric. Metric must be launched by .exe and its folder must have same name as the .exe. Algorithm folder can have any name but must include reindex.exe, compress.exe and decompress.exe and all necessary files for proper functioning. If your compress.exe can also reindex the original object or if your algorithm .exe is a package of all 3 mentioned then you can use a wrapper application for creating the required executables. Make sure that no algorithm, metric or object folder have the same name and do not name your object "mesh.obj" or "reindexed.obj".

Algorithms and metrics must be able to be launched like this:

```
reindex.exe <input.obj> <output.obj>
compress.exe <input.obj> <delta>
decompress.exe <input.obj.bin>
metric.exe <reindexed.obj> <mesh.obj>
```

compress.exe must create output file <name_of_input>.obj.bin and decompress.exe must create mesh.obj as their output. Metric must print the distortion value into the console.

Spinners

Thread spinner determines how many algorithms will be tested simultaneously. Timeout spinner determines how many seconds each process has before it will be terminated. Max bitrate spinner determines at what maximum bitrate is testing stopped. Bitrate step spinner determines maximum bitrate distance between points in graph.

Categories

You can pick the category from the combo box above the list. Categories ending with "(Database)" are records from the database and may not be necessarily synchronized with the local categories. Categories not ending with "(Database)" are locally stored and can be used for testing purposes.

Other

Database connection can be changed in mysql_config.txt. A copy of each table in the database is in the folder Database. All errors and other important info about the processes is saved in log.txt with a timestamp.

Credits

Desktop applications "Algorithm testing" and "Wrapper" was created by Slavomír Verner and WEB application for displaying graphs of tested algorithms was created by Jan Matušík.