



Linux Ubuntu 26.04 Manual Pages on command 'gtk4-rendernode-tool.1'

\$ man gtk4-rendernode-tool.1

gtk4-rendernode-tool(1) GTK commands gtk4-rendernode-tool(1)

Name

gtk4-rendernode-tool - GskRenderNode Utility

SYNOPSIS

```
gtk4-rendernode-tool <COMMAND> [OPTIONS...] <FILE>
gtk4-rendernode-tool benchmark [OPTIONS...] <FILE>
gtk4-rendernode-tool compare [OPTIONS...] <FILE1> <FILE2>
gtk4-rendernode-tool convert [OPTIONS...] <FILE1>
gtk4-rendernode-tool extract [OPTIONS...] <FILE>
gtk4-rendernode-tool info [OPTIONS...] <FILE>
gtk4-rendernode-tool match [OPTIONS...] <PATTERN> <FILE>
gtk4-rendernode-tool render [OPTIONS...] <FILE> [<FILE>]
gtk4-rendernode-tool show [OPTIONS...] <FILE>
```

DESCRIPTION

gtk4-rendernode-tool can perform various operations on serialized rendernodes.

COMMANDS

Information

The `info` command shows general information about the rendernode, such as the number of nodes, and the depth of the tree.

Showing

The `show` command displays the rendernode.

`--offload`

Puts the node into a GraphicsOffload. Intended for testing offloading capabilities of simple

rendernodes.

--undecorated

Removes window decorations. This is meant for rendering of exactly the rendernode without any titlebar.

Rendering

The render command saves a rendering of the rendernode as a png, tiff or svg image or as pdf document. The name of the file to write can be specified as a second FILE argument.

--renderer=RENDERER

Use the given renderer. Use --renderer=help to get a information about possible values for the RENDERER.

--dont-move

Keep the node position unchanged, relative to the pixel grid.

Benchmark

The benchmark command benchmarks rendering of a node with the existing renderers and prints the runtimes.

--renderer=RENDERER

Add the given renderer. This argument can be passed multiple times to test multiple renderers. By default, all major GTK renderers are run.

--runs=RUNS

Number of times to render the node on each renderer. By default, this is 3 times. Keep in mind that the first run is often used to populate caches and might be significantly slower.

--no-download

Do not attempt to download the result. This may cause the measurement to not include the execution of the commands on the GPU. It can be useful to use this flag to test command submission performance.

Compare

The compare command compares the rendering of a node with a reference image, or the renderings of two nodes, or two images. If any differences are found, the exit code is 1. If the images are identical, it is 0.

--renderer=RENDERER

Use the given renderer.

--output=FILE

Save the differences as a png image in FILE.

--quiet

Don't write results to stdout.

Convert

The convert command converts a symbolic SVG icon into a node and writes the result to stdout.

--recolor

If this option is used, the resulting node will have its symbolic colors replaced by the values given to the --fg, --success, --warning and --error options. Otherwise, the node will have the unreplaced colors, which can be useful to diagnose rendering issues.

--fg=COLOR --success=COLOR --warning=COLOR --error=COLOR

Set the symbolic colors to recolor the icon with. If not specified, default colors are used.

--size=SIZE

Sets the size to render the icon at. The size can be either a number or a string of the form WIDTHxHEIGHT.

Extract

The extract command saves all the data urls found in a node file to a given directory. The file names for the extracted files are derived from the mimetype of the url.

--dir=DIRECTORY

Save extracted files in DIRECTORY (defaults to the current directory).

Matching

The match command allows to count occurrences of node patterns in a larger node. The syntax for patterns allows to describe collections of nodes with given types, like this:

(mask . color)

Match mask nodes with any source child and a color node as mask child.

(rounded-clip linear-gradient)

Match rounded clip nodes containing a linear gradient.

(container 2 color (fill color))

Match containers with 2 children, the first of which is a color node and the second of which is a fill node containing a color node.