

CLI Options

`--help | -h [<option_name> | <task_name>]`

Shows help information. For example:

```
ugene --help          ## Shows general UGENE CLI help.
ugene -h

ugene --help=<option_name>  ## Shows help for the <option_name> option.
ugene -h <option_name>

ugene --help=<task_name>    ## Shows help for the <task_name> task.
ugene -h <task_name>
```

`--task=<task_name> [<task_parameter>=value ...]`

Specifies the task to run. A user-defined UGENE workflow schema can be used as a task name. For example:

```
ugene --task=align --in=COI.aln -out result.aln

ugene --task=C:\myschema.uwl --in=COI.aln --out=res.aln
```

`--log-no-task-progress`

A task progress is shown by default when a task is running. This option specifies not to show the progress.

`--log-level="[<category1>=<level1> [, ...]]"`

Sets the log level per category. If a category is not specified, the log level is applied to all categories.

The following categories are available:

- "Algorithms"
- "Console"
- "Core Services"
- "Input/Output"
- "Performance"
- "Remote Service"
- "Scripts"
- "Tasks".

The following log levels are available: TRACE, DETAILS, INFO, ERROR or NONE.

By default, loglevel=ERROR.

For example:

```
ugene --log-level=NONE

ugene --log-level="Tasks=DETAILS, Console=DETAILS"
```

`--log-format="<format_string>"`

Specifies the format of a log line.

Use the following notations: L - level, C - category, YYYY or YY - year, MM - month, dd - day, hh - hour, mm - minutes, ss - seconds, zzz - milliseconds.

By default, logformat="[L][hh:mm]".

`--license`

Shows license information.

`--lang=language_code`

Specifies the language to use (e.g. for the log output). The following values are available:

- CS (Czech)
- EN (English)

- *RU* (Russian)

--log-color-output

If log output is enabled, this option make it colored: *ERROR* messages are displayed in red, *DETAILS* messages are displayed in green, *TRACE* messages are displayed in blue.

--session-db

Session database is stored in the temporary file that is created for every UGENE run. But it can supplied with the command line argument. If the supplied file does not exist it will be created. The session database file is removed after closing of UGENE.

For example:

```
ugene --session-db=D:/session.ugenedb
```

--version

Shows version information.

--tmp-dir=<path_to_file>

Path to temporary folder.

--ini-file=<path_to_file>

Loads configuration from the specified .ini file. By default the UGENE.ini file is used.

--genome-aligner

UGENE Genome Aligner is an efficient and fast tool for short read alignment. It has 2 work modes: build index and align short reads (default mode). If there is no index available for reference sequence it will be built on the fly.

Usage: *ugene --genome-aligner { --option[=argument] }*

The following options are available:

--build-index Use this flag to only build index for reference sequence.

--reference Path to reference genome sequence

--short-reads Path to short-reads data in FASTA or FASTQ format

--index Path to prebuilt index (base file name or with .idx extension). If not set, index is searched in system temporary directory. If *--build-index* option is applied, index will be saved to specified path.

--result Path to output alignment in UGENEDB or SAM format (see *--sam*)

--memsize Memory size (in Mbs) reserved for short-reads. The bigger value the faster algorithm works. Default value depends on available system memory.

--ref-size Index fragmentation size (in Mbs). Small fragments better fit into RAM, allowing to load more short reads. Default value is 10.

--n-mis Absolute amount of allowed mismatches per every short-read (mutually exclusive with *--pt-mis*). Default value is 0.

--pt-mis Percentage amount of allowed mismatches per every short-read (mutually exclusive with *--n-mis*). Default value is 0.

--rev-comp Use both the read and its reverse complement during the aligning.

--best Report only about best alignments (in terms of mismatches).

--omit-size Omit reads with qualities lower than the specified value. Reads which have no qualities are not omitted. Default value is 0.

--sam Output aligned reads in SAM format. Default value is false.

For example:

Build index for reference sequence:

```
ugene --genome-aligner --build-index --reference=/path/to/ref
```

Align short reads using existing index:

```
ugene --genome-aligner --reference=/path/to/ref --short-reads=/path/to/reads --result=/path/to/result
```

