

To use the application in command line interface (CLI) mode, the user can set `-console` as an application argument. After that, they can start inputting all other commands listed below. Alternatively, the user can proceed with commands in the original argument list, such as:

```
-console -NEXT_COMMAND -NEXT ...
```

## Command signature:

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```
-[COMMAND] [OPTIONS]=[VALUE]
```

## Commands:

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`-help`

Purpose:

Prints help for all commands or for a specific command.

Settings:

- `command_name` (Optional): The name of the command to print help for. Default: (prints help for all commands)

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`-file_load`

Purpose:

Loads a file from the specified path.

Settings:

- `filepath` (Required): The path of the file to load.

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`-file_save`

Purpose:

Saves the current state to a file at the specified path.

Settings:

- `filepath` (Required): The path of the file to save.
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`-run_script_file`

Purpose:

Execute a sequence of commands from a specified script(text) file. Each command in the file should be on a new line.

Settings:

- `filepath` (Required): The path of the script file to execute.
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`-complexity`

Purpose:

Creates a job to add complexity layer of a model based on the specified type.

Settings:

- `type` (Required): Specifies the type of complexity calculation. Possible Values: `'HEIGHT'`, `'AREA'`, `'RUGOSITY'`, `'TRIANGLE_EDGE'`, `'TRIANGLE_COUNT'`, `'VECTOR_DISPERSION'`, `'FRACTAL_DIMENSION'`, `'COMPARE'`
- `resolution` (Optional): Specifies the resolution in meters for the complexity calculation. Alternative to `relative_resolution`. Default: `Minimal possible`
- `relative_resolution` (Optional): Specifies the resolution as a float between `0.0` and `1.0`, where `0.0` represents the lowest possible resolution and `1.0` represents the highest. Alternative to `resolution`. Default: `0.0`
- `jitter_quality` (Optional): Specifies the quality of jitter applied to the model. Higher values mean more jitters and potentially smoother results but slower processing. Possible Values: `1`, `7`, `13`, `25`, `37`, `55`, `73` Default: `55`
- `run_on_whole_model` (Optional): Specifies if the calculation should be run on the whole model without jitter. Default: `"false"`

- `triangle_edges_mode` (Optional): Specifies the mode of triangle edges calculation. Relevant only for `'TRIANGLE_EDGE'` complexity type. Default: `MAX_LENGTH`
- `rugosity_algorithm` (Optional): Specifies the algorithm for rugosity calculation. Relevant only for `'RUGOSITY'` complexity type. Possible Values: `'AVERAGE'` , `'MIN'` , `'LSF(CGAL)'` Default: `MIN`
- `rugosity_is_using_unique_projected_area` (Optional): Specifies if the unique projected area should be used for rugosity calculation. Relevant only for `'RUGOSITY'` complexity type. Default: `"false"`
- `rugosity_is_unique_projected_area_approximated` (Optional): Specifies if the approximation should be used for unique projected area rugosity calculation(Speeds Up by Over 100x). Relevant only for `'RUGOSITY'` complexity type. Default: `"true"`
- `rugosity_delete_outliers` (Optional): Specifies if the outliers should be deleted from the rugosity calculation. Relevant only for `'RUGOSITY'` complexity type. Default: `"false"`
- `rugosity_min_algorithm_quality` (Optional): Specifies the quality of the rugosity calculation. Relevant only for `'RUGOSITY'` complexity type and when the `rugosity_algorithm` is set to `'MIN'` . Possible Values: `1` , `9` , `19` , `33` , `51` , `73` , `91` , `99` , `129` , `163` , `201` , `289` , `339` , `393` , `441` Default: `91`
- `fractal_dimension_should_filter_values` (Optional): Specifies if the app should filter values that are less than `2.0` . Relevant only for `'FRACTAL_DIMENSION'` complexity type. Default: `"true"`
- `is_standard_deviation_needed` (Optional): Specifies if the app should also add layer with standard deviation. Default: `"false"`
- `compare_first_layer_index` (Required): Specifies the index of the first layer to compare. Relevant only for `'COMPARE'` complexity type.
- `compare_second_layer_index` (Required): Specifies the index of the second layer to compare. Relevant only for `'COMPARE'` complexity type.
- `compare_normalize` (Optional): Specifies if the app should normalize the layers before comparing. Relevant only for `'COMPARE'` complexity type. Default: `"true"`

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`-evaluation`

Purpose:

Creates an evaluation job with the specified settings to test a layer or other objects.

Settings:

- `type` (Required): Specifies the type of evaluation. Possible Values: `'COMPLEXITY'`
  - `subtype` (Required): Specifies the subtype of evaluation. Possible Values: `'MEAN_LAYER_VALUE'` , `'MEDIAN_LAYER_VALUE'` , `'MAX_LAYER_VALUE'` , `'MIN_LAYER_VALUE'`
  - `expected_value` (Required): Specifies the expected value for the evaluation.
  - `tolerance` (Required): Specifies the tolerance for the evaluation.
  - `layer_index` (Optional): Specifies the index of the layer to evaluate. Relevant only for `'COMPLEXITY'` evaluation type. Default: `'-1'` Which means the last layer.
  - `convert_to_script` (Optional): Specifies if the job should be converted to a script that later can be used to run the same job but with actual values.(Mostly used to make it easier to create a script file for new models) Default: `"false"`
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`-global_settings`

Purpose:

Sets a global setting for the application.

Settings:

- `type` (Required): Specifies the type of global setting. Possible Values: `'EVALUATION_JOB_TO_SCRIPT'` , `'OUTPUT_LOG_TO_FILE'`
  - `int_value` (Optional): Specifies the integer value for the global setting. Default: `0`
  - `float_value` (Optional): Specifies the float value for the global setting. Default: `0.0`
  - `bool_value` (Optional): Specifies the boolean value for the global setting. Default: `"false"`
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`-export_layer_as_image`

Purpose:

Exports a layer as an image.

## Settings:

- `export_mode` (Required): Specifies the mode of the export. Possible Values: `'MIN'` , `'MAX'` , `'MEAN'` , `'CUMULATIVE'`
  - `save_mode` (Required): Specifies the type of image file. Possible Values: `'PNG'` , `'GEOTIF'` , `'GEOTIF_32_BITS'`
  - `filepath` (Required): Specifies the path of the file to save.
  - `resolution` (Required): Specifies the resolution in meters for the image.
  - `resolution_in_pixels` (Optional): Specifies the resolution in pixels for the image. Default:
  - `layer_index` (Required): Specifies the index of the layer to export.
  - `force_projection_vector` (Optional): Specifies the projection vector for the image. Possible Values: `'X'` , `'Y'` , `'Z'` Default: `Calculated on fly`
  - `persent_of_area_that_would_be_red` (Optional): Specifies the persent of area that would be considered outliers and would be red. Default: `5.0`
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`-query`

## Purpose:

With this command, users can query information to be outputted to the console or log.

## Settings:

- `request` (Required): Specifies what to query. Possible Values: `'EVALUATION_SUMMARY'`
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## Examples:

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```
-load filepath="C:/data/mesh.obj"
-save filepath="C:/data/processed_mesh.rug"
-complexity type=RUGOSITY rugosity_algorithm=MIN jitter_quality=73
-evaluation type=COMPLEXITY subtype=MAX_LAYER_VALUE expected_value=5.02 tolerance=0.01
```

## Notes:

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- For Boolean settings, use `"true"` or `"false"`.
- Paths must be enclosed in quotes.