

Command line

Arnold render can be executed from the Cinema 4D Command Line as well. Make sure Arnold is the active renderer in the render settings when you save your scene, then run the render command, as you'd normally do.

```
Commandline.exe -render myscene.c4d -frame 0 100 -oimage myimage.exr -oformat exr
```

There are some Arnold specific arguments available:

- **-arnoldDevice [cpu|gpu]**: overrides the Render device of the scene.
- **-arnoldLogLevel [level]**: overrides the Arnold log level of the scene. The available values are the following:
 - 0: Errors
 - 1: Warnings
 - 2: Info
 - 3: Debug
- **-arnoldLogFile [path]**: writes the Arnold log to the given file.
- **-arnoldLogToConsole [true|false|on|off]**: enables/disables logging to the console output.
- **-arnoldAbortOnLicenseFail [true|false|on|off]**: aborts the render on license fail when turned on.
- **-arnoldSkipLicenseCheck [true|false|on|off]**: does not check for a valid license and renders with watermark when turned on.

For example, the following command outputs the Arnold debug log to */path/to/myscene.log*:

```
Commandline.exe -render myscene.c4d -frame 0 100 -oimage myimage.exr -oformat exr -arnoldLogLevel 3 -arnoldLogFile "/path/to/myscene.log"
```

Scene Export

Scene export can be executed from the command line as well via the **-arnoldSceneExport** parameter followed by the export options.

The following options are available:

- **scene**: Path of the C4D scene file which needs to be exported. This parameter is mandatory.
- **format**: Output file format, *ASS* or *USD*. If not specified, the plugin guesses the format from the file extension.
- **filename**: Path of the output file. If not given, the file is written next to the c4d scene file.
- **compressed**: If given the scene is exported directly to gzip-compressed files (.ass.gz). Only for ASS format.
- **asciiAss**: If given values exported to a standard text format, if not given (default) binary encoding is used. Only for ASS format.
- **expandProcedurals**: If given procedurals will be expanded before exporting the scene.
- **exportObjectHierarchy**: If given the whole hierarchy (children) of the selected objects is exported.
- **mask**: Specifies which Arnold node types are included in the .ass export. See the [AtNodeEntry](#) page of the Arnold API for the available node types.
- **exportType**: Specifies which objects are exported. Possible values are:
 - **0**: all
 - **1**: selected
 - **2**: selected individually
- **startFrame**: Specifies the start frame to be exported. When not given Start Frame from the render settings is used.
- **endFrame**: Specifies the end frame to be exported. When not given End Frame from the render settings is used.
- **frameStep**: Specifies the increment between frames. When not given Frame Step from the render settings is used.
- **camera**: You can override active scene camera by this option by specifying the name of the camera. Note that camera names must be unique otherwise always the first camera with the same name is used.
- **take**: Specifies the take to be exported. Alternatively you can use the **-take** argument instead of this option.

For example, the following command exports frame range *10-20* of *myscene.c4d* to *myscene.ass*:

```
Commandline.exe -arnoldSceneExport "scene=c:\path\to\myscene.c4d;format=ASS;filename=c:\path\to\myscene.ass;startFrame=10;endFrame=20"
```

Note that on Windows the export is executed in the background, therefore, you have no output in the console. You can redirect the output to a file using the **>** directive as follows:

```
Commandline.exe -arnoldSceneExport "scene=c:\path\to\myscene.c4d;format=ASS;filename=c:\path\to\myscene.ass;startFrame=10;endFrame=20" > export.log 2>&1
```

Bake Texture

[Baking textures](#) from the command line requires the **-arnoldBakeTexture** parameter followed by the bake options.

The following options are available:

- **outputDir**: Path of the output folder where baked textures are saved. This parameter is mandatory.
- **format**: Output texture file format (exr, png, jpeg or tif). Default is exr.
- **resolution**: Output texture resolution. Default is 512.
- **object**: Name of the object in the scene (e.g. Sphere).
- **material**: Name of the material in the scene used as an override. (optional)
- **filter**: The filter type used for averaging individual subpixel samples into a final pixel color. More information can be found [here](#). Default is gaussian_filter.
- **aovs**: List of AOVs to bake, separated by ';' (e.g. beauty;diffuse_direct). Default is beauty.
- **uvset**: Name of the custom UV set used instead of the default UVs. (optional)
- **polygonSelectionOff**: If given, polygon selections are skipped.
- **cameraAA**: Anti-aliasing quality. More information can be found [here](#). Default is 3.
- **uOffset**: Offset applied on the U coordinates. (optional)
- **vOffset**: Offset applied on the V coordinates. (optional)
- **uScale**: Scale applied on the U coordinates. (optional)
- **vScale**: Scale applied on the V coordinates. (optional)
- **surfaceOffset**: Precision factor that is currently needed to perform the baking. This value depends on the scale of the scene, and artefacts can appear if it's not set properly. Default is 0.001.
- **extendEdgesOff**: If given, extends edges are disabled and black borders appearing in UV seams.
- **startFrame**: Specifies the start frame in case of baking an animated texture. (optional)
- **endFrame**: Specifies the end frame in case of baking an animated texture. (optional)
- **stepFrame**: Specifies the frame step in case of baking an animated texture. (optional)