
Nintendo TWL-System

3D Export Settings (n3es) File Format

Version 1.1.0

(2009/03/04)

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Revision History

Version	Revision Date	Description
1.1.0	2009/03/04	Changed settings_version to 1.1. Added <code>remove namespace</code> option.
1.0.0	2008/05/30	Made revisions in line with the NITRO-System name change (from NITRO-System to TWL-System).
1.0.0	2005/02/02	Initial version.

1 About the n3es File

The Nitro 3d Export Settings (n3es) file is a text file provided by NINTENDO TWL-System for use with the various 3DCG tools to configure the options for the NITRO intermediate file output plug-ins.

File input and output can be performed from the NITRO intermediate file output plug-in.

This file has a shared format that does not rely on the specific 3DCG tools. Its extension is `.n3es`.

2 n3es File Format

An n3es file is a text-format file that contains the items described below.

Refer to the n3es file sample for details about its formatting.

2.1 n3es File Authentication

Comment lines with # are always designated for output.

Also, if the first line does not contain

```
# NNS_Export settings    (A single half-width space goes after the #)
```

or if that line is incorrect, a load error will occur.

2.2 Keywords

There are several keywords in the n3es file that correspond to the options configuration for the intermediate file output plug-ins. These keywords are used as arguments that are stored as the configuration details of in the file.

Refer to the relevant intermediate file output plug-in (NITRO export) option configuration section of the *NITRO Intermediate File Plug-In Manual* for details about which setting corresponds to which option.

Table 1-1 Overview of the Keywords

NNS_Export settings		
settings_version	Version of the n3es file. FLOAT (to one decimal place)	EXAMPLE: settings_version="1.1"
generator_name	Name of intermediate file output plug-in. Character String (Same format as the intermediate file)	EXAMPLE: generator_name="Maya 6.0.1 NNS_Export"
generator_version	Version of intermediate file output plug-in. Numeric String	EXAMPLE: generator_version="1.6.0.20050202"
date	Date n3es file was created. Character String (Same format as the intermediate file)	EXAMPLE: date="2005-01-24T16:52:40"
Output Options		
export	Output target. [all, selection]	EXAMPLE: export="all"

output_file_name	Output file name. Character String	EXAMPLE: output_file_name="test"
process_mode	Plug-in execution mode. [intermediate_file, 3d_material_editor]	EXAMPLE: process_mode="intermediate_file"
output_folder	Output destination folder. Character String	EXAMPLE: output_folder="c:/tmp/"
merge_imd	imd merge load settings. [off, on]	EXAMPLE: merge_imd="on"
merge_imd_path	Path of the imd to merge. Character String	EXAMPLE: merge_imd_path="c:/nitro_model/test.imd"
General Options		
magnify	Model magnification. FLOAT	EXAMPLE: magnify="1.0"
compress_node	Node culling method. [none, cull, merge, unite, unite_combine]	EXAMPLE: compress_node="none"
compress_material	Material compression settings. [off, on]	EXAMPLE: compress_material="off"
frame_range	Region target of output frame. [all, playback, range] Note: Playback is output only from Maya	EXAMPLE: frame_range="all"
start_frame	Start frame. INT	EXAMPLE: start_frame="1"
end_frame	End frame. INT	EXAMPLE: end_frame="9999"
remove_namespace * Output only from Maya	Namespace deletion flag. [off, on]	EXAMPLE: remove_namespace="off"
Output File Selection		
output_imd	imd file output. [off, on]	EXAMPLE: output_imd="on"
output_ica	ica file output. [off, on]	EXAMPLE: output_ica="on"
output_iva	iva file output. [off, on]	EXAMPLE: output_iva="off"
output_ima	ima file output. [off, on]	EXAMPLE: output_ima="off"
output_itp	itp file output. [off, on]	EXAMPLE: output_itp="off"
output_ita	ita file output. [off, on]	EXAMPLE: output_ita="off"

Imd Options		
vertex_style	Vertex coordinate output format. [direct, index]	EXAMPLE: vertex_style="direct"
output_texture	Texture output target. [all, used]	EXAMPLE: output_texture="used"
force_full_weight	Full weight envelope output settings. [off, on]	EXAMPLE: force_full_weight="on"
use_primitive_strip	Strip polygon output settings. [off, on]	EXAMPLE: use_primitive_strip="on"
triangulation Note: Input and output only from 3dsmax	Method for outputting triangles and quadrilaterals. [as_is, as_is_checking, generate_quads, all_tris]	EXAMPLE: triangulation="as_is"
Animation Options		
interpolation	Playback method. [frame, linear]	EXAMPLE: interpolation="frame"
interp_end_to_start	Whether or not to linearly interpolate from the last frame to the first frame. [off, on]	EXAMPLE: interp_end_to_start="off"
frame_step_mode	Animation step settings. [1, 2, 4, auto]	EXAMPLE: frame_step_mode="1"
Tolerance Options		
tolerance_scale	Node's scale tolerance. FLOAT	EXAMPLE: tolerance_scale="0.1"
tolerance_rotate	Node's rotate tolerance. FLOAT	EXAMPLE: tolerance_rotate="0.1"
tolerance_translate	Node's translate tolerance. FLOAT	EXAMPLE: tolerance_translate="0.01"
tolerance_tex_scale	Texture's scale tolerance. FLOAT	EXAMPLE: tolerance_tex_scale="0.1"
tolerance_tex_rotate	Texture's rotate tolerance. FLOAT	EXAMPLE: tolerance_tex_rotate="0.1"
tolerance_tex_translate	Texture's translate tolerance. FLOAT	EXAMPLE: tolerance_tex_translate="0.01"
tolerance_color	Color tolerance. INT from 0 to 31	EXAMPLE: tolerance_color="2"

Notes

- None of the keyword names are repeated. The output is performed in the same order as in the table above.
- Use a slash (/) to designate subfolders in the path for `output_folder` and `merge_imd_path`.
- The output decimal places of the decimal portion of a FLOAT are optional. (However, it is a good idea to output the first decimal place.)

3 Inputting and Outputting an n3es File

3.1 When Outputting from an Intermediate File Output Plug-In ---

Files can be output with the n3es format for all of the items (including the items that are grayed out) that can be configured with the options window for the intermediate file output plug-in.

3.2 When Loading an Intermediate File Output Plug-In ---

The normal item names and their values as described in the n3es file are reflected in the options configuration for the intermediate file output plug-in. If there is an incorrect keyword or value (undesignated character strings or out-of-range values) in the n3es file, that keyword will not load.

When playback is being designated in the `frame_range` item, it will be interpreted as “all” when loading with a 3DCG tool for which there is no playback concept.

4 Example of an n3es File

The following is an example of an n3es file that was output from Maya 2008.

```
# NNS_Export settings
settings_version="1.1"
generator_name="Maya 2008 NNS_Export"
generator_version="1.6.0.20090218"
date="2009-01-24T16:52:40"

# Output Options
export="all"
output_file_name="test"
process_mode="intermediate_file"
output_folder="c:/tmp"
merge_imd="on"
merge_imd_path="c:/nitro_model/test.imd"

# General Options
magnify="1.0"
compress_node="none"
compress_material="off"
frame_range="all"
start_frame="1"
end_frame="9999"
remove_namespace="off"

# Output File Selection
output_imd="on"
output_ica="on"
output_iva="off"
output_ima="off"
output_itp="off"
output_ita="off"

# Imd Options
vertex_style="direct"
output_texture="used"
force_full_weight="on"
use_primitive_strip="on"

# Animation Options
interpolation="frame"
interp_end_to_start="off"
frame_step_mode="1"

# Tolerance Options
tolerance_scale="0.1"
tolerance_rotate="0.1"
tolerance_translate="0.01"
tolerance_tex_scale="0.1"
tolerance_tex_rotate="0.1"
tolerance_tex_translate="0.01"
tolerance_color="2"
```

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