Pose Cleaner
for Poser

Manual Version 1.0

Content

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Important Information

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1. Overview

Pose Cleaner is a tool to clean poses and other Poser content from unwanted entries. This can be used also for other tasks like splitting a pose or material into different parts. It allows to define schemes to apply to one or several poses at once. Because schemes can be defined by sample poses or by editing keys directly, Pose Cleaner can be used with any kind of poses for any figure.

Note: The Pose Cleaner operates on a rather direct level on the structure of pose files, hence some basic knowledge about the Poser file format is required to use this tool.

Because all files in the Poser file format share the same structure, it is possible to apply the Pose Cleaner to any kind of Poser files. However, the tool is made for poses and similar Poser files only, so the result for other kinds of Poser files may be not as expected or intened. It is recommended to use Pose Cleaner for the following Poser file types only: poses, hands, expressions, and material collections. However, any kind of poses may be processed, be it for genuine poses, for morph values or injections, or more special poses, e.g. for turning actors on or off.

Schemes

The essential concept of the Pose Cleaner is a *scheme* to process poses. In short, a scheme defines what kind of information to retain in a pose and what to remove. For example, you may want to remove the translate information from the body actor for a pose to prevent the pose from changing the position of the figure when it is applied. As a scheme for Pose Cleaner, this would mean to select the BODY actor for processing and the translate channels for removing. This example is just intended to give you a general idea about what a scheme can express and is used for, so you better understand the description of the user interface that follows in the next section. More details and examples about defining schemes will be explained later in this manual.

2. User Interface

The interface consists of six filter lists with different levels of data from pose files on the left, the buttons for poses, scheme, and general features on the right, as well as some generic remove options on the right.

2.1. Buttons

There are three types of menu buttons to work with the Pose Cleaner tool. The pose buttons operate on Poser files. The scheme buttons are used to save and restore the schemes defined to process poses with the Pose Cleaner. And finally there are generic buttons.

Pose Buttons

The *Open* button opens a pose file to use it as the starting point for a scheme for processing. This means, the structure of the pose is analyzed and the contained elements are shown in the lists on the left side.

With the *Save* button, the previously loaded pose is saved after the actual scheme was applied. To apply the scheme to several poses at once, you can select the poses to process with the *Process* button or simply drag'n'drop them on the Pose Cleaner.

Note: When saving a loaded pose, you are always asked for a file name. When processing several files at once, the files are directly overwritten, but optionally a single backup can be kept.

Scheme Buttons

A scheme, defined by the various settings in the filter lists and the generic remove options, can be saved with the *Save* button in the scheme section. To load a saved scheme, use the *Open* button.

The *Reset* button clears all lists, resets all remove options, and unloads the loaded pose (if any).

Generic Buttons

The *Info* button shows a dialog with product and version information. The *Options* button opens a dialog with application options. The *Close* button closes the application.

2.2. Filter Lists

Each filter list is for a particular level of information in a pose file. On top of each list is a drop down selection to set the filter mode. With *Remove*, the selected keys in the list will be removed. For *Retain*, only the selected keys are kept, anything else is removed. For the *Actor* and *Channel* lists, the filter mode *Process* will limit the processing to the selected information, leaving all other information unchanged.

Note: Because a processed pose may contain information that is not listed, the options *remove* and *retain* are not just the reverse like inverting the selection in the list. For an empty list, *remove* will remove nothing, but *retain* will keep nothing. Hence, *remove* is the default, because it doesn't change anything for an empty list or without a selection.

For each list, there is also a plus (+) and a minus (-) button on top. With the plus button, you can add keys to a list manually. With the minus button, you remove all selected keys from the list.

The filter list for channels has an additional checkbox, to decide if the filter list is applied to the channel type (e.g. *targetGeom* for morphs) or to the individual channels (e.g. the particular morph *closeLeftEye*).

Note: Changing the channel filter between type or individual will rescan the loaded pose (if any) and hence completely reset the scheme. Decide about this option before defining the scheme.

The six filter lists reflect the internal structure of pose files in the Poser file format:

- *Actor*: Actors are body parts of a figure, deformers, or stand-alone objects.

- *Paramter*: Parameters are different settings for an actor. Many parameters are just on/off, some have numeric values, and some may define more compex properties and relations. Only some parameters can be changed by a pose.

- *Figure Parameter*: Like an actor, also the figure as such has various parameters. Only very few like the locked state can be changed by a pose.

- *Channel*: Channels are numeric properties of an actor. The value for most channels can be changed by the user in Poser directly. The value and other channel parameters like the name can be changed by poses.

- *Channel Parameter*: Each channel consists of various parameters. Some parameters like the value and the name are defined for each channel, some parameters like the morph deltas only for particular channel types.

- *Material*: Figures and actors may have several materials that can be defined in a pose or in a material collection.

2.3. Remove Options

The remove options provide additional options for cleaning a pose file that are not based on the information in the pose structure, but on a more general level for the pose in total.

- Thigh Length: this removes the *thighLength* line that is included in some pose files

- Universal Pose: this removes the *refActor* and *refFigure* entries used for universal poses

- Binary Inject: this removes the *injectPMDFileMorphs* and *removePMDFileMorphs* lines

- Script Calls: this removes the *readScript* lines to embed other poses (on top level only)

- Python Calls: this removes the *runPythonScript* lines (on top level only)

- Preset Mats: this removes the *presetMaterial* blocks (found in some old materials only)

- Empty Figure: this removes the *figure* block, if it is empty (i.e. contains no information)

- Ch Groups: this removes the *groups* blocks from the *channels* blocks

- Zero Channels: this removes all channels, where the values is 0 (or 1 for scaling); this is only done for channels with a single key (i.e. no animation) or if animation is removed

- Animation: this removes all keys in a channel except the first key and sets the frame to 0; it also removes any animation information like key transitions

2.4. Application Options

General

Check *Sort actors* to sort the filter list for actors alphabetically. Otherwise, the original order in the pose file is used, which is usually the same as it is defined in the figure.

Check *Create backups* to keep the previous version as backup when processing files. Otherwise, the existing files are overwritten. The backup has the same name with ".bak" appended. Existing backups are overwritten.

Check *Success message* to get a success message when processing files successfully. Otherwise, you get only an error message in case of errors, but no message if processing ends successfully.

Open File

When opening a Poser file, you can *Remove spaces at line end*, *Remove empty lines*, and *Remove comment lines* (lines beginning with # or /) by checking the according option. Empty lines and comment lines should be removed always, because they might cause problems if they divide lines belonging together.

Write File: Line End

When writing a Poser file, the Poser File Editor can use line ends for Windows (CR, LF), Unix (LF), or Macintosh (CR). It's up to you, Poser will read any format.

Write File: Compression

You can select the Default compression level or use a value from 1 (fastest compression) to 9 (smallest file size). Files will be compressed or not depending on the file extension.

3. Examples

Because Pose Cleaner is a very flexible tool, it's best to give some examples to show how the tool can be used for various tasks. In general, you start by defining a scheme for processing, either by loading a saved scheme, or by opening a pose and selecting keys in the filter lists and changing the options. Then, you either save the pose or select the poses for processing to apply the defined scheme.

3.1. Inspecting a Pose

The simplest case of using Pose Cleaner is to load a pose to find out what kind of information it contains. If you have the according knowledge about the Poser file format, you will easily recognize the type of a pose by the keys that are shown in the filter list.

For example a genuine pose will show the actors in the Actor list, *rotateX*, *rotateY*, and *rotateZ* (maybe also some other like translate or grasp) in the Channel list, and *keys* (maybe also *trackingScaleMult*) in the Channel Parameter list. If you know the actors of the figure, you also will see imediately if it is a complete or a partial pose.

A morph pose will usually only have body and head in the Actor list, valueParm and targetGeom in the Channel list, and keys under Channel Parameter. A morph injection pose will additionally have some other actors and more entries in Channel Parameter like *name*, *hidden*, *indexes*, *numbDeltas*, and *deltas*.

A material pose or collection has nothing but materials in the Material list.

Of course, there are other kinds of poses or mixed poses with various types of information. Just loading a pose in Pose Cleaner will give you an idea what the pose will do.

3.2. Removing Body-Position

Sometimes, applying a pose will also move the figure. This can be intended, e.g. to move a figure to the floor e.g. for a kneeling pose, but it can be unwanted because it resets the position of the figure in the scene. To prevent a pose from changing the position, the *translate* channels have to be removed from the body and maybe also from the hip actor. Because a pose may use IK, the translate channels for other actors should not be removed.

To define a scheme for this, load a pose that is changing the position of the figure. In the *Actor* filter list, select *BODY* and *hip*, and set the mode to *Process*. This ensures that only the body and hip are modified. Under *Channel*, keep *Use Channel Type* active, and select *translateX*, *translateY*, and *translateZ* with the filter mode *Remove*. This removes all translate channels for the selected actors.

3.3. Cleaning an Expression

When saving an expression, this includes all morphs of the head actor. However, most figures have morphs in the head not only for expressions, but also to shape the face and head. To prevent an expression from resetting the shape morphs, you need to remove all but the expression morphs.

To define a scheme for this, you open an expression. Turn off *Use Channel Type* to get a list of the actual morphs, not only *targetGeom* as the morph channel type. Now, select all the morphs that are used for expressions, and set the filter mode to *Retain*. This scheme will remove all morphs from an expression (even morphs that you may add to the figure later) and will keep only the expression morphs.

Of course, you need to define a separate scheme for each figure, because different figures will have their own set of expression morphs.

3.4. Partial Poses and Materials

You may want to define partial poses or materials that change only a part of a figure. E.g. a material will change only the eyes or the face. Or a pose should be applied to the lower or upper body only.

While you can do so when saving the pose or material collection in Poser, it can be tedious to do the same selection each time when saving a pose. It's easier to save the complete pose or material, and then apply a scheme in pose cleaner to several files at once.

Again, you start by loading a complete pose or material. Then, you select the actors or materials you want to include in the partial pose or material, and set the mode for that list to *Retain*.

To split poses or materials into several parts, you simply create copies of the poses and then apply different schemes to different copies, to keep different parts in each copy.