Mesh Sequence Cache Modifier

The Mesh Sequence Cache modifier loads data from Alembic and USD files. It supports static meshes, but is mostly used to load animated meshes. Despite its name, this modifier also supports curves. It also handles file sequences, as well as meshes and curves with varying topology (like the result of fluid simulations).

When importing an Alembic or USD file, Mesh Sequence Cache modifiers are automatically added to time-varying meshes. For time-varying object transforms (so animation of rotation, location, or scale), the Transform Cache Constraint is used. Files other than Alembic or USD, like MDD and PC2 files, can be loaded using the Mesh Cache modifier.

Options

Cache File

Data-block menu to select the Alembic or USD file.

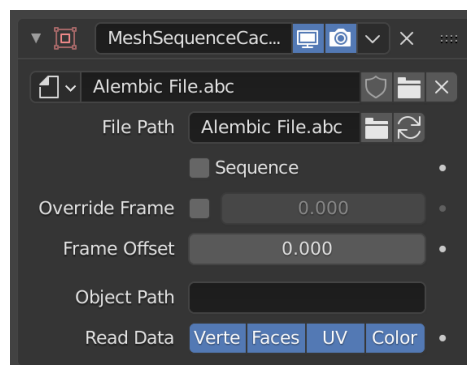**File Path**

Path to Alembic or USD file.

Object Path

The path to the Alembic or USD object inside the archive or stage.

Read Data

Type of data to read for a mesh object, respectively: vertices, polygons, UV maps, and Color Attributes.

Vertices, Faces, UV, Color

Time

Sequence

Whether or not the cache is separated in a series of files.

Override Frame

Whether to use a custom frame for looking up data in the cache file, instead of using the current scene frame.

The *Frame* value is the time to use for looking up the data in the cache file, or to determine which to use in a file sequence.

Frame Offset

Subtracted from the current frame to use for looking up the data in the cache file, or to determine which file to use in a file sequence.

Velocity

Velocity Attribute

The name of the Alembic attribute used for generating motion blur data; by default, this is `.velocities` which is standard for most Alembic files.

> Note
>
> The *Velocity Attribute* option is currently for Alembic files only.

Velocity Unit

Defines how the velocity vectors are interpreted with regard to time.

Frame:

The velocity unit was encoded in frames and does not need to be scale by scene FPS.

Second:

The velocity unit was encoded in seconds and needs to be scaled by the scene FPS (1 / FPS).

> Note

The *Velocity Unit* option is currently for Alembic files only.

Velocity Scale

Multiplier used to control the magnitude of the velocity vector for time effects such as motion blur.

Note

The *Velocity Scale* option is currently for Alembic files only.