

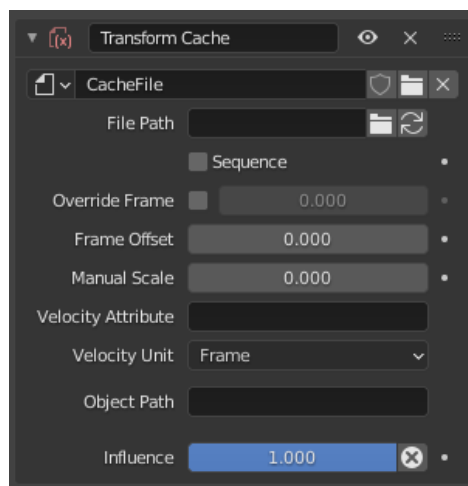
[Skip to content](#)

# Transform Cache Constraint

The *Transform Cache Constraint* is used to stream animations from [Alembic](#) or [USD](#) made at the transformation matrix level (for example rigid bodies, or camera movements).

When importing an [Alembic](#) or [USD](#) file, Transform Cache constraints are automatically added to objects with animated transforms. For time-varying meshes (so deforming animations), the [Mesh Sequence Cache modifier](#) is used.

## Options



Transform Cache Constraint.

### Cache File

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

### File Path

Path to the Alembic or USD file.

### 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.

### Manual Scale

Value by which to enlarge or shrink the object with respect to the world's origin.

### 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 scaled 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.

## Object Path

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

## Influence

Controls the percentage of affect the constraint has on the object. See [common constraint properties](#) for more information.

[Previous](#)  
[Transformation Constraint](#)

Copyright © : This page is licensed under a CC-BY-SA 4.0 Int. License

Made with [Furo](#)

Last updated on 2025-05-10

[View Source](#)  
[View Translation](#)  
[Report issue on this page](#)

[No](#)  
[Tracking Constrai](#)