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Working Limits

There are some limits that you should take into account. Precision issues when working with mesh data for example.

Space

While object positions, vertex locations are not clamped, larger values become increasingly imprecise.

To get an idea of the precision you can work with using different scales.

Here's a table of scales and their associated accuracy.

10:	1/1,048,576 th
100:	1/131,072 th
1,000:	1/16,384 th
10,000:	1/1,024 th
100,000:	1/128 th
1,000,000:	1/16 th

Hint

For a rough rule of thumb, values within -5,000/+5,000 are typically reliable (range of 10,000).

Internally *single precision* floating point calculations are used.

Time

The maximum number of frames for each scene is currently 500,000, and allows for continuous shots for durations of:

24 fps: 5 hours, 47 seconds.

25 fps: 5 hours, 33 seconds.

30 fps: 4 hours, 37 seconds.

60 fps: 2 hours, 18 seconds.

Note

In practice, a finished work is typically composed of output from many scenes. So this limit does not prevent you from creating longer works.

Text Fields

Fixed strings are used internally, and while it is not useful to list all limits, here are some common limits. *Text fields are used for various things like data-block names, modifiers, vertex-groups, UV-layers...*

directory:	767 characters
file-name:	255 characters
file-path:	1023 characters
identifier:	63 characters

Note

Multi-byte encoding means some unicode characters use more than a single ASCII character.