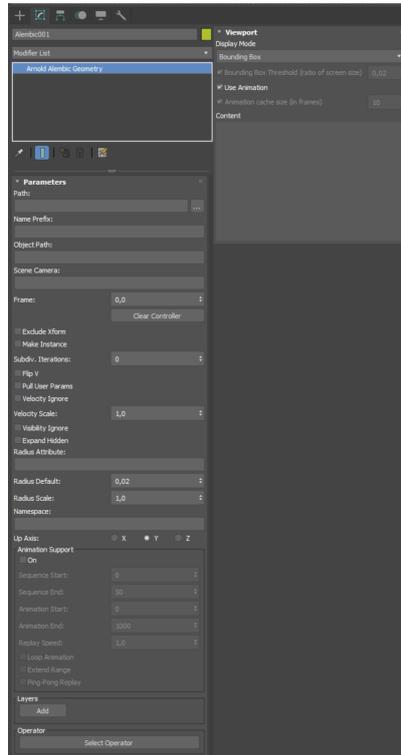


Alembic



A procedural node that is capable of reading **Alembic** files.

Path

The path to the Alembic file.

Name Prefix

Optional prefix to add to all nodes created by the procedural.

Object Path

The Alembic path to expand from in the hierarchy.

Scene Camera

Alembic camera name to replace the scene camera.

Frame

The frame number to expand in the procedural.

Exclude Xform

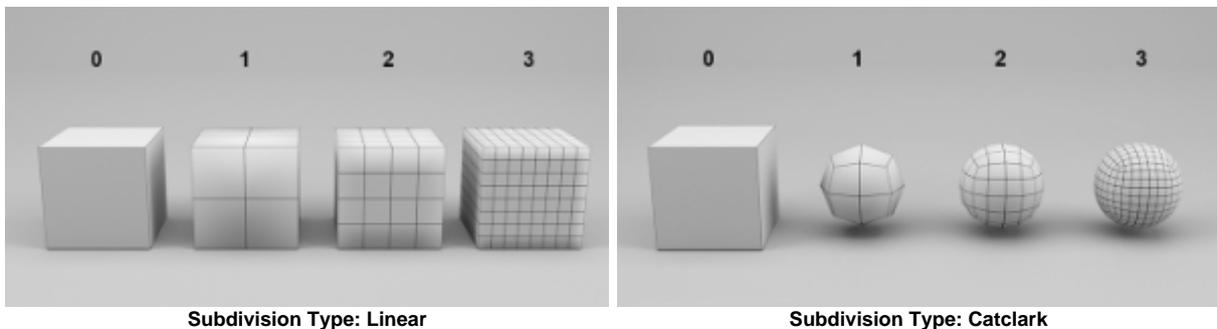
If set to true, the parent transforms of the selected object (provided as the object path) will not be used.

Make Instance

Use instancing for polymesh nodes that have the same shape. This behavior is disabled by default. If enabled, the procedural will attempt to identify identical primitives (using Alembic's per-array-property hash keys) and create corresponding "ginstance" nodes. Two primitives are considered equivalent if the keys of their relevant point position samples match along with any specified subdivision values. This works across multiple archives or invocations of the procedural.

Subdiv. Iterations

The maximum number of subdivision rounds applied to the mesh. When `subdiv_pixel_error` is 0 the number of rounds will be exact instead of a maximum.



i Subdiv. Iterations requires *Pull User Params* enabled to work.

Flip V

Flip *polymesh* v coordinates.

Pull User Params

If you want to pass parameters through to the shapes being created, declare user data with the same type as the parameter, prefixed by the shape name and a colon (:). For example, use `<shape>:<parameter>`. So the following declaration will ensure that every *polymesh* created will have `step_size` set to 0.1.

```
pull_user_params on
declare polymesh:step_size constant FLOAT
polymesh:step_size 0.1
```

Velocity Ignore

Don't do velocity motion blur even if velocity attrs exist.

Velocity Scale

Scale the velocities used for velocity motion blur.

Visibility Ignore

Ignore visibility in the *alembic* file and process all shapes as if visible.

Expand Hidden

If set, all shapes are expanded despite their *alembic* visibility.

Radius Attribute:

The name of the attribute that is looked up to give radius for points and curves default is blank so uses the *alembic* defaults of widths.

Radius Default

Default radius for curves and points if not specified via an attribute.

Radius Scale

Scale the radius attribute that is resolved.

Namespace

Create nodes in this namespace if present.

Up Axis

In certain cases, it may be useful to change the orientation to match the axis of the original Alembic file (coming from other applications). For example, if the up direction is mapped to +Z instead of +Y.

Animation Support

On

Enable reading a sequence of files.

Sequence Start

The start frame of the .abc file sequence.

For example, if your sequence on disk goes from name1001.abc to name 1100.abc, you can pick the files from 1050 to 1080 by entering these values as the Sequence Start and the Sequence End respectively.

Sequence End

The end frame of the .abc file sequence.

Animation Start

The timeline's frame at which the .abc sequence starts to be used.

Animation End

The timeline's frame at which the .abc sequence ends to be used.

If there are not enough files in the sequence to cover the Animation Start-End range, the sequence can be repeated, either from its start or in ping-pong mode.

Replay Speed

Sets the playback speed of the procedural's animation.

Loop Animation

When on, if the animation range exceeds the sequence range, the sequence is looped.

Extend Range

If on, the first and last .abc file of the sequence is used before and after the Animation start and end frame respectively. Else, for those frames, nothing gets rendered.

Ping-Pong Replay

When on, if the animation range exceeds the sequence range, the sequence is read forward, then in reverse, then forward again and so on.

Placeholder

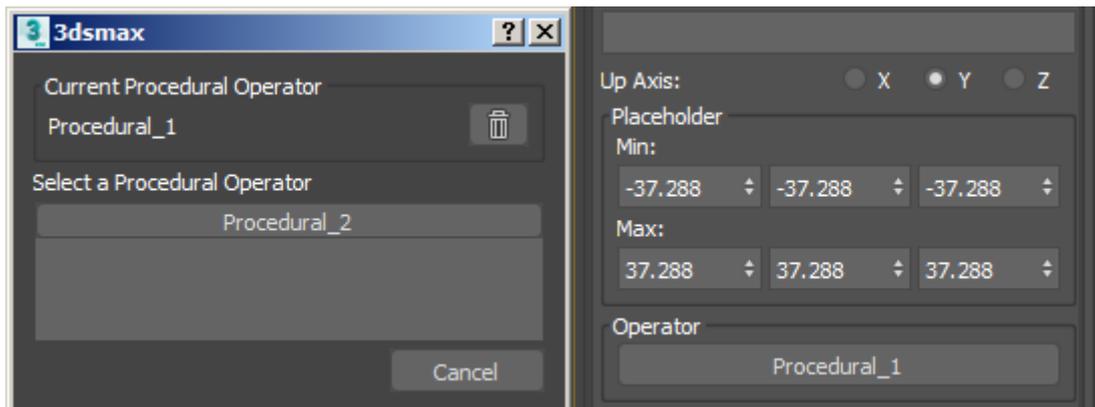
Changes the size of the bounding box representation in the viewport.

Layers

Adds extra files that can be used to override properties in the Alembic file.

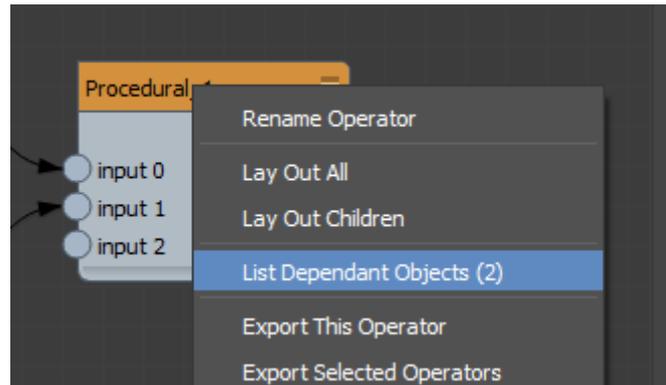
Select Operator

Gives the ability to connect Procedural/Alembic nodes in the [Operator Graph Editor](#).

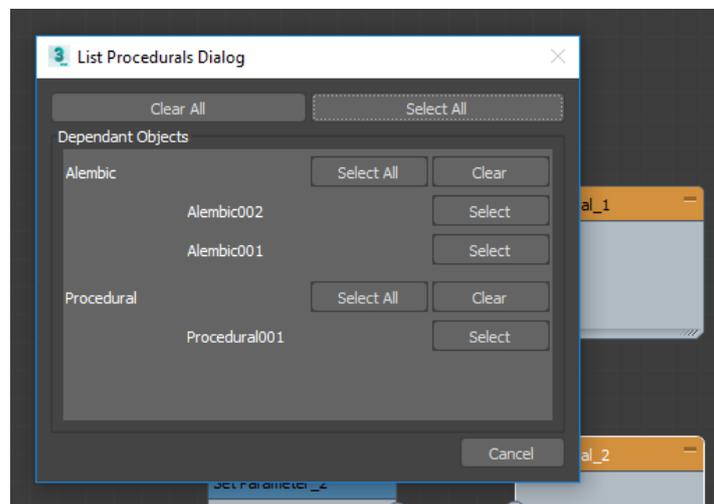


Choose which Procedural to use

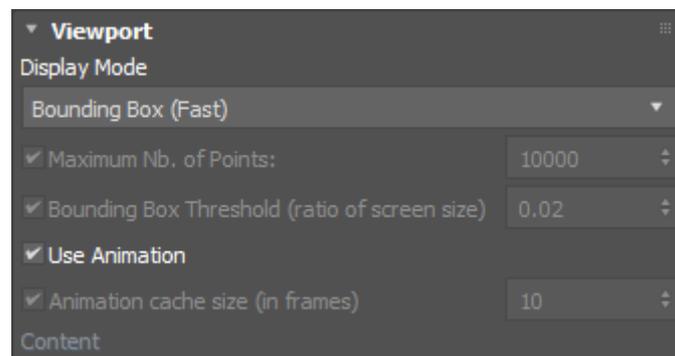
From the *Operator Graph Editor*, you can list the objects connected to the operator.



In this case, there are three INodes, two of them being 3ds MAX instances of the same Arnold [Alembic](#) object.



Viewport



Procedural/Alembic files can be introspected to retrieve geometry and display it in the viewport.

Display Mode

The available viewport display modes are:

- **Bounding Box (Fast):** Displays the contents as a bounding box. It does not need the full ass file load, it simply looks for "bounds" being present. If it is not, it keeps the previous behavior.
- **Bounding Box (Content List):** Displays the contents as a bounding box and in the content list.
- **Points:** Displays the contents as points.
- **Wireframe:** Displays the contents as a wireframe.
- **Shape:** Displays as a shape with full shading.

Bounding Box Threshold (ratio of screen size)

Defines how much to extend the bounding box of the object. The default value is 0.02.

Animation Cache Size (in frames)

Animation frames load on demand and are kept in a cache of the size defined in the UI. If the cache is not used, the data is always trashed (same as the cache size is 1).

Content

Shows the contents of the file. The content tree view selection cannot be used for selection. Double-clicking copies the sub-node name (path) and can be pasted in an operator.