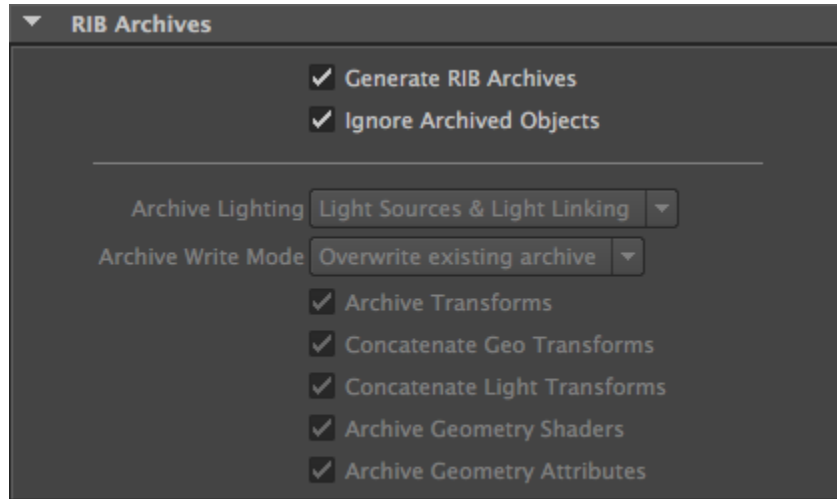


# Advanced: RIB Archives

## Overview

The *RIB Archive* group of attributes offers additional options to fine tune the output of *RIB Archives*. Refer to the [RIB Archive Guidelines](#) for more details about the purpose of a *RIB Archive*. The following attributes are only relevant when the *Render Mode* is set to *Export RIB Archive Only* in the [Render Engine](#) group of attributes.



*The RIB Archives group*



The following two attributes only have an effect when *RIB Archive Nodes* and *Render Passes* are used together to archive scene objects, replace them by their *RIB Archive*, and render the result, all in one operation. An example of such a setup is illustrated in the section "Archiving Scene Elements while Rendering" in [RIB Archive Guidelines](#).

To see the effect of these attributes, these conditions must be met:

- there are *RIB Archive Nodes* as part of the [Scene Elements](#) being rendered, and
- those *RIB Archive Nodes* have their '[Archive Pass](#)' assigned to a *Render Pass*

### Generate RIB Archives

Turning on this option will enable a pre-pass where every pass set as an 'Archive Pass' on *RIB Archive Nodes* is rendered, resulting in all the required RIB archives being generated. The usual rendering process is then resumed. When this option is off, it will be assumed that the required RIB archives have been created previously. This attribute is on by default.

### Ignore Archived Objects

When this option is enabled, the objects that are archived are excluded from the list of objects to render. They are replaced by their RIB archive. Turn this option off if you want to see both the objects and the archive that they are contained in (which produces a duplicata of all archived objects). The list of ignored objects is defined in the *Render Sets* section of every pass set as an 'Archive Pass' on *RIB Archive Nodes*. By default this option is on.



The following attributes are only available if the *Render Mode* is set to *Export RIB Archive Only* (see [Render Engine](#))

### Archive Lighting

Specifies how lighting information is outputted in the RIB archive. The following options are available:

Option	Description
No Lighting	No lighting information will be written in the RIB archive. Use this when the desired lighting will change from one scene to another. When reading the produced RIB archive with a <i>RIB Archive Node</i> , the archived objects will be lit by the lights that are illuminating that <i>RIB Archive node</i> .
Light Linking	The light linking information will be written in the RIB archive file, but not the light sources themselves. This setting allows light sources parameters (such as position, intensity, light color, etc.) to be changed after the RIB archive file has been written and still see these changes reflected in the archive content. However, the light source names must remain unchanged in the scene where the RIB archive is read. If a <i>RIB archive node</i> is used to read the archive file back in a scene, it should be linked to all of the light sources whose light linking information is archived to allow proper handling of the light linking information the archive contains. Refer to <a href="#">The RIB Archive Node</a> .
Light Source & Light Linking	The light sources and light linking information is stored in the RIB archive file. When reading the produced RIB archive with a <i>RIB Archive Node</i> , the archived objects will be lit independently of the lights illuminating the <i>RIB Archive Node</i> . This is the default.

#### Archive Write Mode

Controls when the RIB Archive file is written. The available values are:

Option	Description
Reuse Existing Archive	<i>3Delight for Maya</i> will look for the archive file specified in the <i>RIB filename</i> rendering attribute (see <a href="#">Render Engine</a> ). If the file exists, the only thing done for each frame is to execute the 'Pre Frame MEL' and the 'Post Frame MEL' scripts. Refer to <a href="#">Advanced: MEL Scripts</a> .
Overwrite Existing Archive	The file specified in the "RIB filename" rendering attribute (see <a href="#">Render Engine</a> ) will be overwritten every time a rendering is requested.

#### Archive Transforms

Controls whether or not the object transforms are output to the RIB archive. It is on by default.

#### Concatenate Geo Transforms

When this attribute is on, the transforms for geometric objects are output as relative transforms. Turn this option off to output absolute transforms, which will force the archived objects to be placed at their archived positions, regardless of the placement of the *RIB Archive Node* used to read the archive back in a scene. This option is on by default.

#### Concatenate Lights Transforms

If this attribute is on, the transforms for light sources are output as relative transforms. Turn this option off to output absolute transforms, which will force the archived light sources to be placed at their archived positions, regardless of the placement of the *RIB Archive Node* used to read the archive back in a scene. This option is on by default.

#### Archive Geometry Shaders

When this attribute is on, the shaders of geometric objects are archived. Turning this option off will prevent the shaders from being archived, which will force the archived objects to use the shaders assigned to the *RIB Archive Node* used to read the produced archive. This option is on by default.

#### Archive Geometry Attributes

When this attribute is on, the attributes specified in a geometry attribute node attached to any archived object will be output in the RIB archive file. Turn it off to avoid outputting these attributes in the archive, which will force the archived objects to use the geometry attribute node attached to the *RIB Archive Node* used to read the produced *RIB Archive*. This option is on by default.



The attributes inside the 'Geometry' group of a [Geometry Attribute Node](#) have a direct effect on how the objects in *Maya* are translated to *RenderMan* primitives. This translation is done when creating the *RIB Archive*. For this reason, these attributes will have no effect when set on a *RIB Archive Node*, regardless of the state of the 'Archive Geometry Attributes' option used when creating the *RIB Archive*.