The RIB Archive Node

A RIB Archive is a group of objects exported to a RIB file that is intended to be read back into a scene later on. This approach offers various benefits:

- 1. the scene can be made lighter as several objects are replaced by a single node used to read the archive;
- 2. the RIB generation time and the disk space the files occupy can be decreased as common objects for all frames can be put in files shared by all frames instead of being duplicated in each frame file.

▼ RIB Archive					
Archive Pass		<none></none>			
RIB Filename	ene>/rib/de	lightRibArchiv	eShape1.rib		۹.
Archive Read Mode	Immediate 👻				
	🖌 Ignore Rib File Bbox				
Bbox Min	-5.515	-3.470	0.313		
Bbox Max	1.424	3.470	7.252		
Bbox Scale	1.000	1.000	1.000		

In 3Delight for Maya, RIB Archives can be read into a scene by the RIB Archive Node, while archive files can be written by setting the 'Output Mode' attribute of a render pass to 'Export RIB Archive'. Both nodes can be connected together to allow automatic archiving of selected scene elements. Simple and more sophisticated RIB archive usage are illustrated in RIB Archive Guidelines.

To create an RIB Archive node use the 'Add RIB Archive' item of the 3Delight menu. The following RIB Archive attributes are available:

Archive Pass

This option menu lists render passes whose 'Output Mode' have been set to 'RIB Archive' (see Render Engine). When a *Render Pass* is selected in this menu, the *RIB Archive* node is connected to that *Render Pass*. The connected *Render Pass* will be used to create the *RIB Archive* file; it will also provide a bounding box (as soon as it is rendered) and a value for the *RIB Filename* attribute of the *RIB Archive* node. When a *Render Pass* is connected, the *Archive Read Mode* is automatically set to 'Delayed'. By default, the option menu is set to '<none>'. There are two buttons to the right of this option menu:

Texture button

Used to create a new render pass node. This new node will be connected to the RIB archive node. It will also have its *Render Mode* attribute set to 'RIB Archive'. Its *RIB Filename* will have a default filename based on the *RIB Archive* node that it is connected to.

AE button

Used to show the connected Render Pass in the Attribute Editor.

Archive Read Mode

Controls how the archive reading will happen when rendering. Available values are detailed in the following table.

Value	Description
Delayed	This value will have the renderer read the archive only when the space included in its bounding box is visible to the camera. This is the most efficient option as the archive will only be read when necessary. To work properly, a decent bounding box needs to be defined, which is always the case when the archive has been created. Refer to the section "Using a RIB Archive" in RIB Archive Guidelines for more details about this.
Immedi ate	This value will have the renderer read the archive file as soon as it encounters the directive, meaning that the file will be read regardless of whether the archive is visible to the camera or not. This option should be used when the bounding box attributes should be ignored.

Ignore Rib File Bbox

When this attribute is on, any bounding box information contained in the *RIB Archive* file is ignored. The *Bbox Min* and *Bbox Max* attributes are unlocked and can be modified.

Bbox Min Bbox Max

Shows the minimum/maximum points in x, y and z for the archive bounding box. The bounding box information is used to draw the *RIB Archive* boun ding box in the scene viewport; it is also required for proper rendering when *Archive Read Mode* is set to 'Delayed'.

Bbox Scale

Specifies scale factors to resize the archive bounding box in the x, y and z directions.