# mtoatools

Release 0.3.1

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MtoAtools is a set of production tools for use with Arnold for Maya. This package will grow over time.

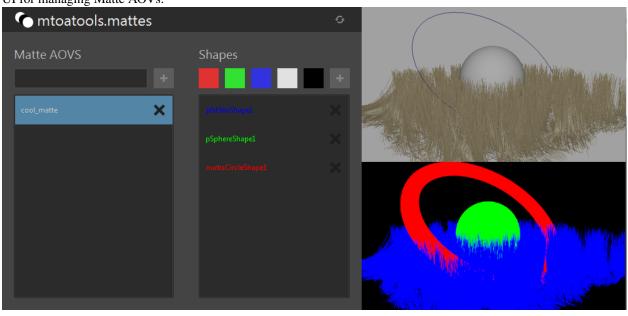
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2 Contents

## CHAPTER 1

# mtoatools.mattes

UI for managing Matte AOVs.



### **Table of Contents**

#### 2.1 Installation

#### 2.1.1 Get mtoatools

You can get mtoatools from pypi or directly from git.

#### PyPi

```
$ pip install mtoatools
```

#### Git

```
$ git clone https://github.com//mtoatools.git
$ cd mtoatools
$ python setup.py install
```

#### **Direct from GitHub**

Visit the github repo at http://github.com/danbradham/mtoatools.git and click the *Download Zip* button. Extract mtoatools\_master/mtoatools folder directly to your maya scripts directory.

#### 2.1.2 Installing the maya shelf

In maya run the following command from a python tab in your script editor.

```
import mtoatools.shelf
```

The mtoatools shelf tab should appear. To reload the mtoatools shelf use python's module reload mechanism.

```
reload(mtoatools.shelf)
```

Now you're ready to use mtoatools!

# 2.2 mattes

A guide to creating Matte AOVs using mtoatools.

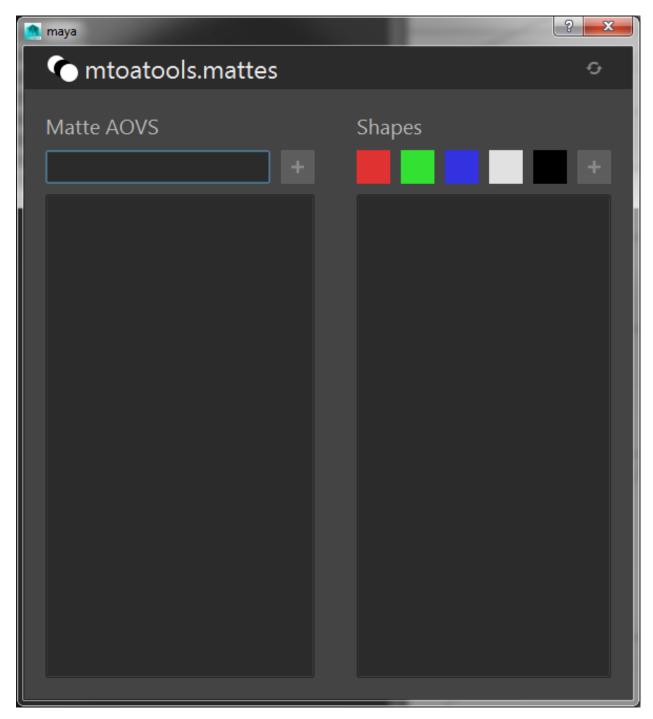
#### 2.2.1 Is Arnold your current Renderer?

Before we begin, make sure the mtoa plugin is loaded, and your current renderer is set to Arnold.

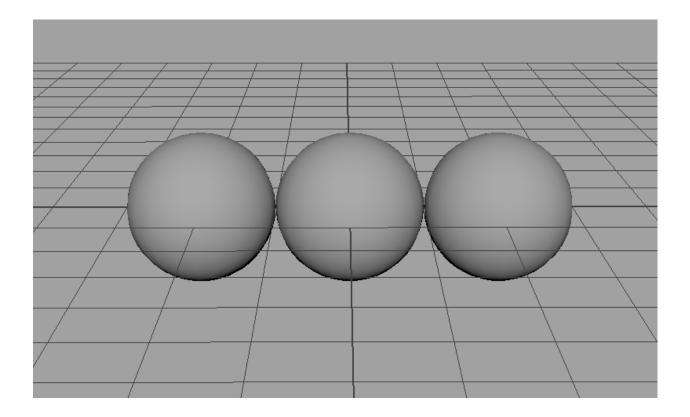
Now load up the mattes ui by clicking the will appear.



button on the mtoatools shelf. The following ui



Right, now we can add some mattes to a scene. Let's create 3 polySpheres lined up along the X axis. Like so...

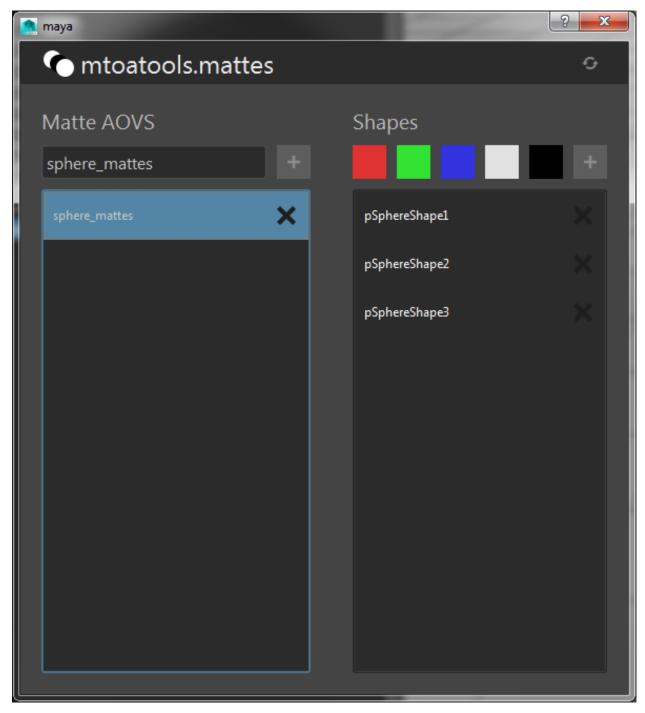


## 2.2.2 Create your first matte

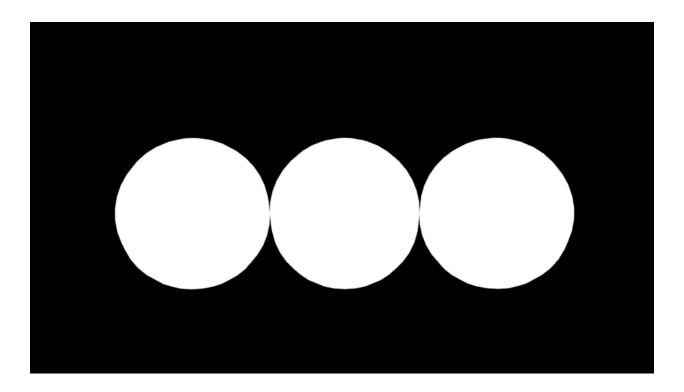
Select the 3 spheres you just made. Type *sphere\_mattes* into the line edit field of the mattes ui and click the + icon.



A new matte will be created named sphere\_mattes including the 3 spheres you selected. If you select the new matte from the *Matte AOVs* list you should see the following.

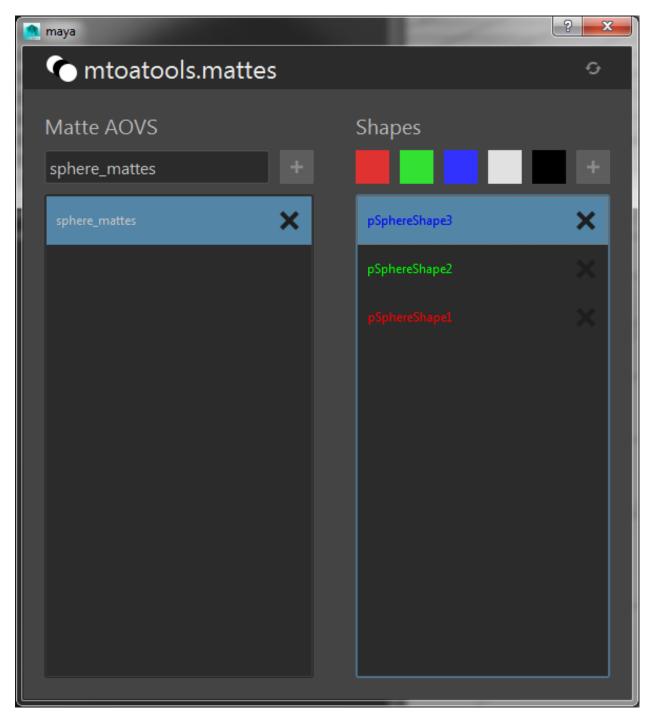


The color of the text for each shape corresponds to the color it will be when rendered. As you can see, the default color is white. Here's what we get when we render our sphere\_mattes AOV right now.

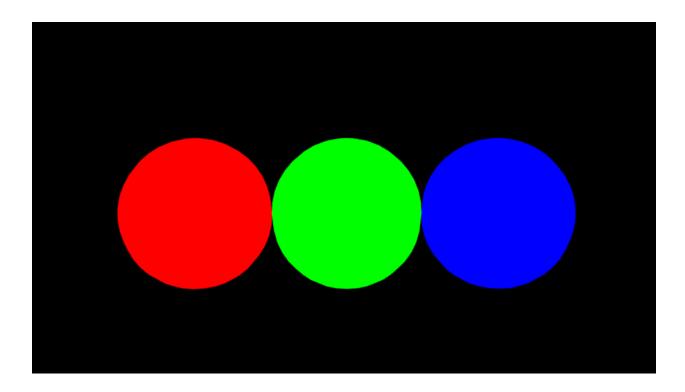


# 2.2.3 Colored Mattes

You can create colored mattes by selecting the geometry from the *Shapes* list and clicking one of the colored swatches. You can also select the geometry directly in your viewport and the corresponding list item will be selected in the *Shapes* list. Let's assign red, green, and blue to the 3 spheres.

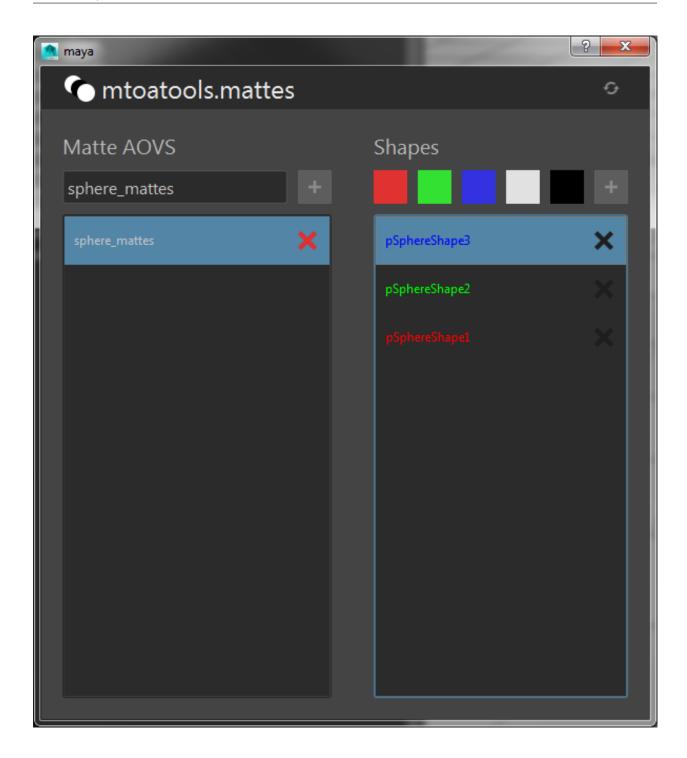


Now lets render the matte again and take a look at our colored mattes.



# 2.2.4 Removing Mattes and Shapes

At any point you can delete a matte or remove a shape from a matte by clicking the *X* button on one of the list items.



#### 2.2.5 Renaming Mattes

Double click on a matte list item to rename a matte. Press escape to abort.

### 2.2.6 The how and why of mtoatools.mattes

The basic setup is to have an mtoa\_constant\_\* double3 attribute on each shape, and an AOV with an aiUserData-Color node plugged into its defaultValue. The aiUserDataColor pulls the color from the shape node mtoa\_constant\_\*

attribute.

# 2.3 History

### 2.3.1 0.3.0 (03312016)

- Added MatteAOV serialization
  - api methods (save\_mattes, load\_mattes)
  - added menubar supporting serialization to MatteDialog

### 2.3.2 0.2.0 (03302016)

- Added HDR Light Rig
- Added rename method to MatteAOV model
- · Added rename functionality to mtoatools.mattes UI
  - double click to edit name
  - enter to finish editing
  - escape to cancel rename

#### 2.3.3 0.1.0 (09122015)

• First release on PyPI.

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# CHAPTER 3

# Indices and tables

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