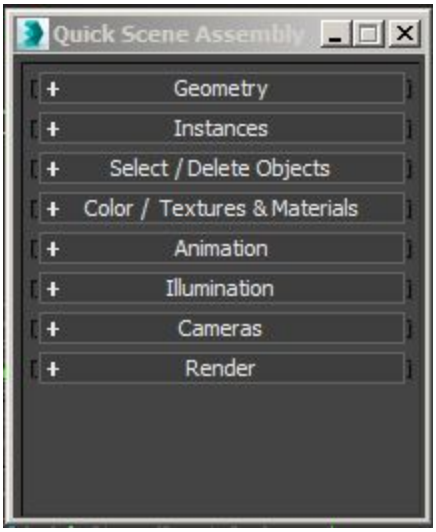
Quick Scene Assembly

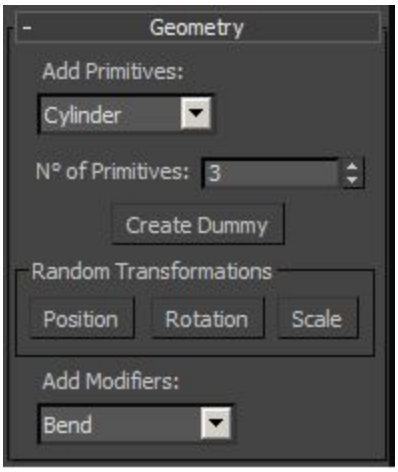
Overview:
Development of tool for create a simple random scene with the basic cg workflow (modeling, lookdev, animation, lighting and render). The main goal is built a quick scene where we can used to do testing of other tools.

Structure:
This tool represent a basic CG workflow and is based on V-Ray renderer.It´s divided in 8 sections:

1. **Geometry**
2. **Instances**
3. **Select/Delete Objects**
4. **Color/Textures & Materials**
5. **Animation**
6. **Illumination**
7. **Cameras**
8. **Render**



1.-Geometry



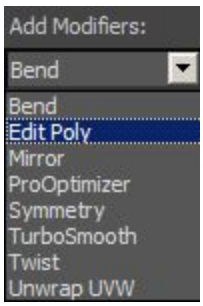
In geometry section, we can create the differents **primitives** of 3D max:

1. Box
2. Sphere
3. Cylinder
4. Torus
5. Teapot
6. Cone
7. GeoSphere
8. Tube
9. Pyramid
10. Plane

Defining the **number of primitives** that we want create, the first geometry is positioned in 0,0,0, increase the length on x.

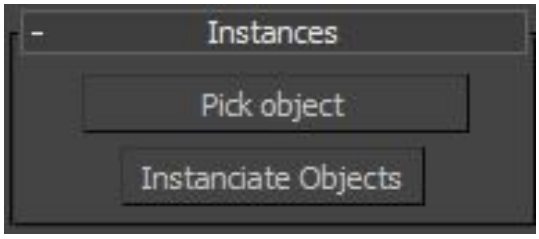
The button "**Create Dummy**" will make a dummy in position 0,0,0.

We have the **Random Transformation** group, this actions can be applied to any selected object.



At last, we have **Add Modifiers**,
this is a menu of some most used modifiers.

2.- Instances



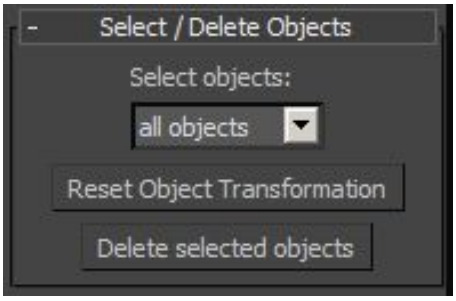
In Instances section, we can transform an object or group of objects in instances from a specific object.

In **Pick object** button, select the source object.

Then press the **Instanciate Objects** and objects in scene that share part of name of source object will be replaced by instances of this.

Note: This function is based in object names, so It´s necessary rename the object that you want convert in instances.

3.-Select/Delete Objects



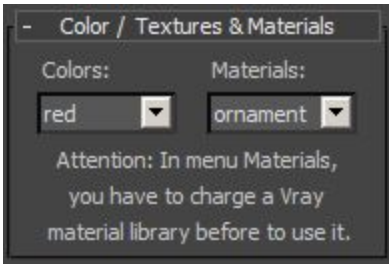
This section have a menu called **Select Objects**,with a list of objects by the Subclasses category:

1.- All objects
2.- Geometry
3.- Helpers
4.- Lights
5.-Cameras

The **Reset Object Transformation** button will reset the transformations (position, rotation and scale) of the selected objects.

And the **Delete selected objects** will delete the selected objects.

4.-Color/Textures & Materials



In the lookdev section , we have two options:

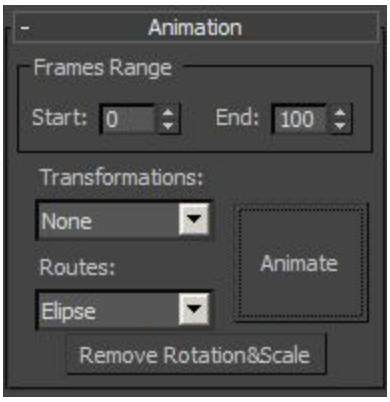
Add color to our selected geometry,

or

Add Materials from a Vray material library previously charged.

Note: the materials of this menu can be changed depending of available materials in our scene.

5.-Animation

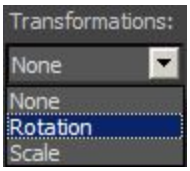


With the **Remove Rotation&Scale** we can delete only the frames of rotation and scale.

In the **Animation** section we have some general features for an animation:

° **Start** frame and the **End** frame.

° Basic variation of **random transformation:**



°Also, there are some **routes** for animate the objects:

All this features can be combined with any selected

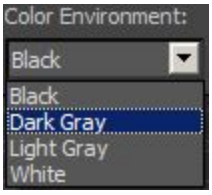
objects as geometry, lights, cameras, etc. when the **Animate** button is pressed.

6.-Illumination

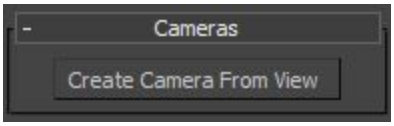
In the **Illumination** section, we have a **Vray Lights group**, with this we can create a simple set of vray lights for the selected object(s). This calculates the average of distances. Our options are:

- **Lights Around** (4): front, back, left and right.
- **Top Light**: one light above the selected object(s).
- **Bottom Light**: one light down of the selected object(s).

Also, we have options for color environment:

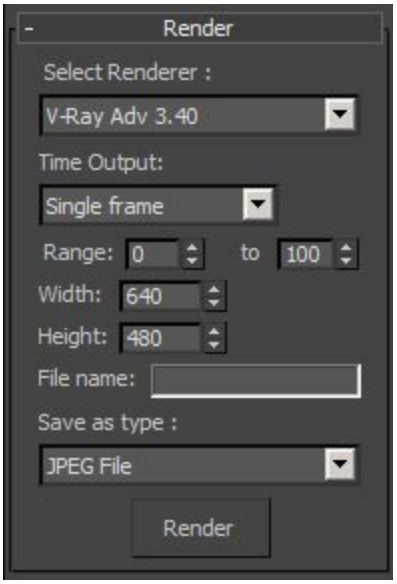


7.-Cameras



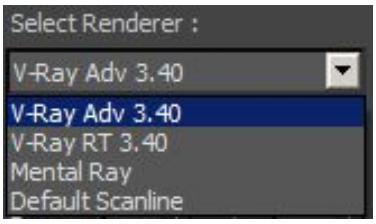
In this section, we have the practical function of **Create Camera From View**, create a camera from the active viewport.

8.-Render



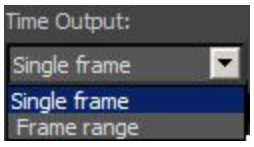
In the last section of our tool, we have **Render**, here we can choose the renderer that we want, and the options are:

- V-Ray Adv
- V-Ray RT
- Mental Ray
- Default Scanline



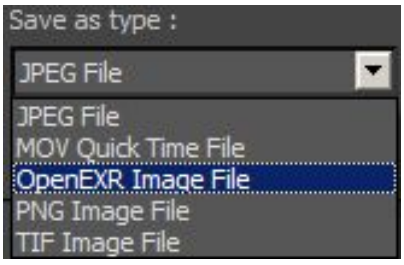
This option can change depending of each configuration, the computer must have installed **Vray for 3D Max.**

By default, when this tool is executed, V-Ray Adv is assigned as current renderer.



Time Output, in this menu we can choose if our render output will be a single frame or a sequence of images.

Also, we have the features of **Range** on the timeline, the resolution of our renders (**width and height**), and the **file name** textbox where we will give name to images.



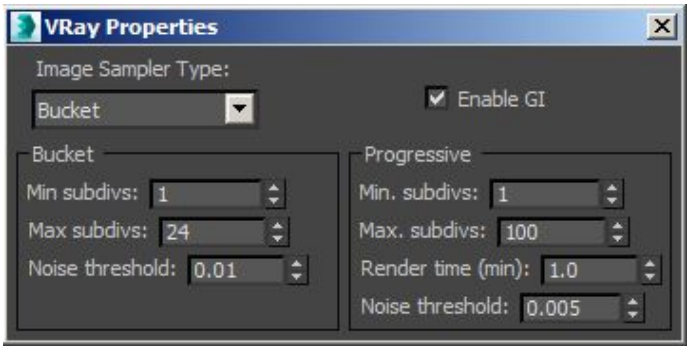
In the last menu, we will choose the format of our output files according with the available options**.**

- **JPEG**
- **MOV**
- **EXR**
- **PNG**
- **TIF**

The **Render button** will execute the action using the features specified. This action will render our material, will save our files into the folder called render that will create automatically if it´s not exist, in the follow structure.

Example: C:\environment**editables**\scene_v001.max (editable file directory)
C:\environment**renders**\image_001.exr (render files directory)

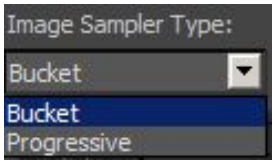
Vray Properties



Vray Properties window arise when we select **V-Ray Adv** as renderer.

We can enable or disable **Global Illumination.**

We can choose **Image Sampler Type** between **Bucket** and **Progressive**.



And modify properties as: **min/max sub**, **noise**, and **render time**.