

MULTI

MTL'S

MAP'S

TOOLS



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version 1.0

INTERFACE

The interface of the script consists of the harmonically connected dotnet (.textbooks .labels .buttons) and maxscript ui control types. extra rollouts are linked to the main rollout, move together with it and when opening some of them, it automatically closes the previously active one. the position of the main rollout on the screen is saved upon closing so the next time it is opened, the main rollout appears on the same spot.



MULTI | MTL'S | MAP'S | TOOLS | v.1.0 |



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MULTI | MTL'S | MAP'S | TOOLS | -

Sub-Material Type : Standard ... (3dsmax) **c** **a**

Multimaterial Name : MultiStd

Sub-Materials Name : StdMat

Single Material Name :

Wirecolor | Rename : Box001 **Rename**

Wirecolor Presets : **Random**

Assign Mtl To Object : ☐ Sub-Mtl's Count : 10

Use Checker Map : ☐ UV Tiling Size : 5.0

Random Diffuse Map Color | Global Tiling : **Rand-D** **G-Tiles**

Diffuse Toner [H][S][V] : 0.0 0.5 1.0

Default Map Color : Map Based On: Mataterial ID

Repeat Color : ☐ Number Of Color : 20

Reset M.E Scene Mtl's To M.E Remove Object Mtl

Get Mtl ID's Count Rand. Mtl | Obj ID Clean MultiMtl

Auto UVW Map E-Poly Mtl ID Adv. Select By Mtl

Assign Renderer Show | Hide Maps Concept Mtl

a about (toggle)

Script Name : | MULTI | MTL'S | MAP'S | TOOLS | v.1.0 |

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Created | Modified On : 08 / 06 / 2011 | 08 / 06 / 2011

The original message box is replaced by the simpler "messageroll" in which every message is shown on top of the main rollout, and without "beep".

[TITLE]: MMT_v.1.0
[MESSAGE]: Welcome to MMT!



If you use this script by the given manual, every message should look like this; if not, then, i've probably made some slip-ups. Please let me know.

created by:



BRANKO ŽIVKOVIĆ

ABOUT MMT

The *MMT* is the maxscript with a collection of tools for fast preparing models or whole scene for mappings and rendering that i've created for my personal design work at home. many of these tools are self-explained, but in later description i will try to explain some hidden functions and limits found in this script.

Version Requirement:

The *MMT* is written and tested in the 3dsmax 2011 x64. There are some commands in script from Graphite Modeling Tools as well as commands for creating a new map *VRayMultiSubTex* (VRay 2.0+). Feel free to install and use these scripts, however, i can't be held responsible for any problems that arise from their use. Every version of the 3dsmax (2010+) and installed VRay 2.0+ will provide the use of all commands.

Installation: unzip file "bsa_mmt_v1.0.zip" and read "install.txt".

HOW TO USE

c create a multimaterial or multimap and assign to selection:

Standard ... (3dsmax)

Standard ... (3dsmax)

VRayMtl ... (V-Ray Adv)

Arch & Design ... (mental ray)

*VRay + VRayMulti SubTex

*Arch & Design + Multi/Sub-Map

From the dropdown list choose sub-mtl type (first three choices) or single mtl with multimap. Every type has the pre-defined name for multimtl, sub-mtl and multimap (4th and 5th type), or you can enter a new one.

Assign Mtl To Object : ☒ By choosing this option created mtl is automatically added to the selected object (objects) with preview of the diffuse map in viewport. in case that the object is not selected, mtl only appears in the active slot of the material editor.

Sub-Mtl's Count : 10 number of sub-mtl's (first three types)

Number Of Color : 20 num. of color in multi/sub-map (5th types) - mental ray

Get Mtl ID's Count if the selected object already has a defined number of mtl id, then by clicking this button that value is sent to already explained spinners, so that the created mtl gets a precise number of sub-mtl's or colors.

NOTE: work only with object types: e-poly, e-mesh, spline with shell modifier, e-patch, parametric obj.(primitives etc.), vray proxy. don't try to use mr proxy and nures objects.

more options for first three types:

Use Checker Map : ☒ add checker map with random color in every sub-mtl's diffuse map slot.

UV Tiling Size : 5.0 size of u/v tiling for the checker diffuse map.

Random Diffuse Map Color | Global Tiling : **Rand-D** **G-Tiles**

after creation, the assigned mtl can be afterwards adjusted by using "Rand-D" and "G-Tiles".

Rand-D changes a diffuse color or diffuse map (checker) color. G-Tiles changes tiling 20 or 30 maps in the diffuse map slot. Define first u/v tiling size and press the button. the condition is that the object (objects) is/are selected and has/have an assigned mtl whose diffuse map has these properties.

Diffuse Toner [H][S][V] : ☒ 0.0 0.5 1.0

with this option checked you can tone diffuse color of the multimtl or a single mtl with chosen color and (HSV) values. work with "create" and "Rand-D" button.

options for 4th and 5th types:

These adjustments are for *VRayMultiSubTex* and mental ray *multi/sub-map*, depending on the chosen type. After pressing "CREATE" you will get a mtl with a random colored multimap in the diffuse slot.

Default Map Color : Map Based On: Mataterial ID

Repeat Color : ☒ repeat color in multi/sub-map (5th types) - mental ray

HOW TO USE

Wirecolor | Rename :

define wirecolor of the selected object (objects).
Rename selected object with the unique name.
The edit box shows how many objects are selected on the scene and you can rename multiple objects at once.

Wirecolor Presets :

Assign wirecolor from preset palet or press "Random".
This button changes randomly wirecolor on selected object (objects) or, if nothing selected, then every object in the scene has same wirecolor which changes randomly.

BUTTONS

Reset M.E

Reset or condense the material editor.
Choose type of mtl and press "OK".
You can replace gray material slots with randomly assigned colored mtl's.
If nothing is checked then on "OK" button pressed the rollout will close.

Scene Mtl's To M.E

If selected object (objects) has material assigned then you can send that material to the material editor, or, if nothing selected, then 24 mtl's from scene will be sent to the "M.E".

Remove Object Mtl

This tool will clean your scene from unwanted materials, especially when scenes are imported from other softwares (Autocad, Revit...etc.).
Note: When using the first option and while deleting all materials, it is recommended to save the scene or use the "hold" or "atch" operations.

Rand. Mtl | Obj ID

1st part of this rollout introduces counters with additional info of the selected object (E-poly or E-mesh).
2nd part - (as the name implies) uses the assign unique mtl id to each element inside an E-poly.
3rd part - quickly assigns several mtl's (randomly) from the material editor to the selected scene objects.

Note: Max number of the sample slot materials in the material editor is 24.
For 4th part no particular explanation is necessary because the very commands explain all.
It's important to emphasize that each of these tools has the possibility to use range (from 1 to n) or you can enter the values by yourself (1,2,3,4...etc.).
Note: For separating numbers use only "comma" sign.

By combining these tools properly, you can in no time prepare a scene for rendering or creating render elements.

Clean MultiMtl

This tool is used for cleaning up the non-used sub-materials, in a way that only those are left behind that are assigned to face mtl id's on the E-poly and E-mesh object. It can be used for correcting materials assigned to "VRay Proxy", primitives and "REC" extended objects. No need for collapsing geometry, except if the assigned modifiers change the mtl id of the base object. The cleaned multiMtl is created in the "M.E" and automatically assigned to the object. Also you can assign a new name to the material with an index of active mtl slot.

Auto UVW Mtl

This tool creates a Blended Box map (Auto UVW map) and assigns on selected objects. Work only with the 2D maps (Bitmap, Checker, Gradients, Swirl and Tiles map). The chosen map is projected on the object in the local coordinated sys. (X,Y,Z). The edges of the map are blended so you can put the map on a curved surface and not have horrible seams. The map can be combined with color correction map, and add to bump slot. Before creating set "Tiling" and "Blur" parameters. The button "Clear Map" removes selected map from the rollout, a "Clear Mtl" removes only this mtl from the chosen objects.

E-Poly Mtl ID

Combination of two most powerful an most used stuff in poly modeling. An extra feature here is the "Arrange ID's" option. If the ID list looks like this (as in the picture), then by one click you get a line (1,2,3,4,5,6). By this you get better conditions for later mapping process.
Note: Convert object to E-poly before using these tools.

Adv. Select By Mtl

Quickly select scene objects with the same material. This option can be used in two ways: **1st** - if an object is selected, then by pressing the button, you expand the selection on all objects that share the same mtl. **2nd** - if nothing is selected then a material is used from the "M.E". For both ways there is a rule: if the selection is a part of a group, then the group opens. The hidden objects are ignored.

Assign Renderer

Fast way to assign renderer engine. Select the type of renderer and press "OK" or "NO" to close the rollout.

Show | Hide Maps

This button provides control over both material and map level texture showing in the viewport. If select some object, then this function effects only them; otherwise, it effects on all scene objects.

Concept Mtl

With this tool you can very quickly create the concept mtl (Standard) and later change his properties with predefined options or you can use manual mode. The material will be automatically assigned on all selected objects which don't have mtl already. By moving first two sliders (auto mode) the diffuse color is changed altogether with wirecolor; or specular and glossiness value. You will see the visual changes on an object when is the button up of the slider (added disable/enabled scene redraw function for better performance in the viewports). On pressing "S" button diffuse and wirecolor will "swap" the place. Self-Illumination options represents the replacement for viewport render level "Flat" ("consistent colors" in 3dsmax 2012).
Note: The concept mtl colors will be better displayed if you enable gamma correction for the color selector and the material editor.

Pick Auto UVW Mtl Type :

Standard (3dsmax)

Bitmap

Assign To Selection ☒

Use Color Correction ☐

Assign To Bump Slot ☐

Tiling

Blur

2.0

0.5

Clear Map

Clear Mtl

OK

NO

Reset And Replace With :

Standard Mtl ☒

VRay Mtl ☐

Arch and Design Mtl ☐

Assign Random Color ☐

Condense Mtl Editor ☐

OK

NO

Remove All Mtl's From :

Current Scene ☒

Selected Object ☐

Unselected Object ☐

OK

NO

E-Poly And E-Mesh Counters :

Select An Object And

Elements Count 4

Polygons Count 3200

Objects Count 1

Info Editable Poly Object

Randomize Mtl ID's [E-Poly] : ☒

Min | Max 1 10

1,2,3,4,5

Assign Random Mtl's From M.E : ☐

Min | Max 1 24

1,2,3,4,5

Assign And Randomize Objects ID's : ☒

Current Object ID Value 0

Get ID Select ID Set ID

Min | Max 1 10

1,2,3,4,5

Clean MultiMtl :

Selection

Sub-Mtl's 10

Face MtlID's 5

MultiMtl Name :

MultiMtl_#1

OK

NO

Assign Renderer :

mental_ray_renderer

OK

NO

Quick Concept Mtl :

Diffuse | Wirecolor

Mtl Name: Blueprint

Specular | Glossiness

30 20

Finish: Gloss

Self-Illumination

Glow: Flat

THANKS

In the end, I would like to thank the following people whose scripts inspired me:

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