# **SCRIPTS**

### MS.01 — Multi Color Schemes

### **Purpose**

Switches to any of various numbered color schemes.

### **Files**

• BS-MultiColorSchemes.mcr

### **Assumptions**

- MultiMaterial IDs are defined.
- SceneStates are defined as 'LS.[scheme as Mtl-ID]'.
- Objects are selected, whose schemes are to be switched.

### **Notes**

Since MS.01's original writing, 3dsMax has "hidden" easy showing of the Scene State Manager. It is buried in an [.ini] file that "remembers" where dialog boxes were last positioned.

### For details, see:

<<u>P:\\_misc support\- R&D\3dsMax scripts\MS.01 multi color schemes\Multi Color Scheme - how to get the Manage Scene States window to open correctly.docx>.</u>

# MS.02 — Color Adjustments

# **Purpose**

Adjust map colors with sliders — superseded with built-in map "Color Correction" functionality.

### **Files**

• BS-ColorAdjustments.mcr

### **Assumptions**

• Object is selected, whose material's color is to be adjusted.

# **Notes**

File is not annotated due to non-use — but file is to be kept for code referencing.

# MS.03 — Scene Switcher

# **Purpose**

Switch lighting and camera scenes, as defined with BS standards in in-scene: 'BSsceneSwitcherNote', camera names, and environment settings; then offers to submit to net-render.

### **Files**

- BS-SceneSwitcher.mcr
- BS-SceneSwitcher.ms
- BS-SendToNetRender.ms

### **Assumptions**

- Render output pixel dimensions and vRay settings are set.
- Cameras are selected:
  - o None, all camera-scenes will be sent to net-render.
  - One, its scene setting will be set, but nothing sent to net-render.
  - o More than one, each camera-scenes will be sent to net-render.
- Non-vRay cameras are selected:
  - User will be required to pick desired cameras.

#### **Notes**

BS-SendToNetRender.ms is a great reference point for other scripts in automating sending to net-render.

### MS.04 — Multi Material Automater

### **Purpose**

Facilitates stucco color adjustments according to BS standards.

### **Files**

• BS-StuccoColorsAdjustmentAutomater.mcr

## **Assumptions**

- The material to be manipulated came from the BS standard "- medit" library.
- The material to be manipulated is selected in the Material Editor slot.

# MS.05 — Spline Divider

### **Notes**

Abandoned – not started.

# **MS.06** — Layer Manager Folders

### Notes

Abandoned – not started.

# MS.07 — Material Editor

### **Notes**

Abandoned – not started.

# MS.08 — Irradiance Maps Off [On]

### **Purpose**

For animation, turn off [on] the irradiance map option for VRayMaterials, for all scene and slot materials.

### **Files**

- BS-IrrMapOff.mcr
- BS-IrrMapOff.ms
- BS-IrrMapOn.mcr
- BS-IrrMapOn.ms

# **Assumptions**

It is desired that ALL scene and slot materials have their Irradiance Map disabled.

### **Notes**

The "On" script is not associated with a button, but is accessible from the same directory.

# **MS.09** — Instance Modifiers

### **Purpose**

Create an object copy-clone, with the Modifiers instanced.

### **Files**

• BS-InstanceModifiers.mcr

### **Assumptions**

No further modifiers will be added to the "parent" that the new "orphan" should take-on.

### **Notes**

The new "orphan" must oddly be drug away from "parent" even though it can't be "seen."

# MS.10 — Proxies On [Off]

# **Purpose**

Turn on [off] proxies, for relevant objects in selection.

# **Files**

- BS-ProxiesOn.mcr
- BS-ProxiesOn.mcr

# **Assumptions**

None.

# **Notes**

The "off" version was handled separately later, but not given a separate project folder.

# MS.11 — Walk Modifier Stack

### **Purpose**

The "walkStack" script cycles through modifiers (or base-object).

The "walkSubObj" script cycles through modifier (or base-object) sub-object levels -- and back to the top (out of the sub-object levels).

### **Files**

- ms.11\_walkSubObj.mcr
- ms.11\_walkStack.mcr

# **Assumptions**

There are modifiers in the stack.

#### **Notes**

Tied to a keyboard shortcut, not a button.

# MS.12 — Select What Camera Sees

### **Purpose**

Snap-shot selection of what a camera sees – excluding wholly occluded objects.

### **Files**

BS-SelectWhatCamSees.mcr

### **Assumptions**

Camera view is maximized, and all desired layers are on and thawed as needed.

### Notes

See reference material in script's folder.

Abandoned – significant research and testing done. Tests proved performance of methodology was too inefficient to warrant use.

# **MS.13** — Prepare Animation Settings

## **Purpose**

Prepare scene for animation by manipulating vRay settings.

### **Files**

• BS-PrepForAnim.mcr

### **Assumptions**

[to be determined through further guidance]

#### Notes

Abandoned – started with vRay light settings, which is completed. Needs further guidance to complete whole.

## MS.14 — Save Render Elements

# **Purpose**

Automate output of vRay Render Elements, based on File Output under Common in Render dialog.

### **Files**

- BS-GetVRayRendElemPathAndName.mcr
- [deprecated] GetVRayRendElemPathAndName.ms

## **Assumptions**

The desired output path (and related checkbox) has already be set under the Common tab in the Render dialog, such that it can be copied to the vRay render output file under Frame Buffer settings.

## **Notes**

Often forgotten even though it has a button, but remains useful if remembered.

# MS.15 — Toon Render

### **Purpose**

Net-render edges with white (non-shaded) surfaces, and transparent background, for multiply-blend layering in Photoshop'd Water Color post-effects.

### **Files**

- BS-ToonRender.mcr
- BS-ToonRender.ms

# **Assumptions**

• Asks if is an Exterior scene: if not, asks what pixel width to set lines.

### Notes

Backburner Manager's IP Address must manually be updated at m.connect #manual "192.168.0.32" port:3234

# **MS.16** — MacroScript Buttons

# **Purpose**

[NOT A SCRIPT]

Create buttons for BS scripts.

### **Notes**

See buttons section above.

# MS.17 — Proxies Off

### Notes

See MS.10 Proxies On above.

# MS.18 — Walk Sub-Objects

### **Notes**

See MS.11 Walk Modifier Stack above.

# MS.19 — Random Rotate and Scale

# **Purpose**

Randomly rotate each selected object on its Z, then uniformly scale +/- 10% from pivot.

### **Files**

- BS-RandRotateAndScale.mcr
- BS-RandRotScale.ms

## **Assumptions**

Objects to be rotated and scaled, have their desired pivots set, and are already selected. No other objects are selected.

### **Notes**

Group children will not be individually affected, the group "dummy" container will be.

# MS.20 — VRay Frame

# **Purpose**

Send vRay frame-buffer image to printer.

### **Files**

exposedVrayData\_possibleAccessToInProcessRenderVrayFrameBuffer.txt

## **Assumptions**

An image exists in the frame-buffer.

### **Notes**

Abandoned due to complexity of access to print functionality, compared to the benefit of the feature.

# **MS.21** — Use Interp Off All Materials

### **Purpose**

Turn of "Use Interpolation" for both refraction and reflection for all scene materials.

### **Files**

BS-UseInterpOffAllMtls.ms

### **Assumptions**

All vRay materials are desired to have their refraction and reflection "use interpolation" turned off.

#### **Notes**

Not a button.

# **MS.22** — Instance Selected Objects

# **Purpose**

Instance selected objects as new 'slaves' of a 'master' object.

### **Files**

- BS-InstanceSelectedObjects.mcr
- BS-InstanceSelectedObjects.ms

# **Assumptions**

Select 'slaves' first, then the 'master'.

### Notes

This may take a while with large sets – in which case, it is recommended to run on smaller sets of objects.

# **MS.23** — Instance Same Material Names

# **Purpose**

All materials of same name will be made instances.

### **Files**

- BS-InstanceSameMtlName.mcr
- BS-InstSmMtlNm.ms

### **Assumptions**

All scene materials are to be processed.

# **Notes**

A .csv file will be output, in case of mid-script failure.

# MS.24 — Viewport Maps Off / On

# **Purpose**

Turn off/on the viewport display of textures, for all scene and slot materials.

### **Files**

- BS-ViewMapOff.mcr
- BS-ViewMapOff.ms
- BS-ViewMapOn.mcr
- BS-ViewMapOn.ms

# **Assumptions**

All materials are desired to have their maps' display in the view port be off/on.

### **Notes**

There is no user-intent verification.

# MS.25 — VRay Render Presets

# **Purpose**

Sets basic VRay render settings for targeted output resolutions, but does not get, nor set, the resolution.

## **Files**

- BS-vrRenderPresets MASTER.ms
- BS-vrRenderPresets\_1.ms
- BS-vrRenderPresets\_2.ms
- BS-vrRenderPresets\_3.ms
- BS-vrRenderPresets\_4.ms
- BS-vrRenderPresets\_5.ms
- BS-vrRenderPresets\_5.ms

### **Assumptions**

User is familiar with settings being changed, and the desired resolution is set, and is compatible with the chosen preset.

#### Notes

There are relevant .mcr files that relate to the .ms files. The MASTER is the same as each of the #'s except the #'s define the array-indexed setting to be used, at the bottom of the script file: doPreset #.

# MS.26 — Set Distributed Render Group A

## **Purpose**

Sets the vRay Distributed Render "group" to ODD machines.

### **Files**

• BS-SetDRgroupA.mcr

### **Assumptions**

"Server" nodes (non-workstation nodes) are named S##, and workstation nodes are named W##. User has write-access to the 3dsMax plugcfg folder. Run (getDir #plugcfg) in the MaxScript Listener to get the plugcfg folder path.

### Notes

Actual setting, in order to work with net-render submitted jobs, per vRay functionality, is defined in the vray\_dr.cfg file, under the 3dsMax plugcfg folder.

# MS.27 — Set Distributed Render Group B

#### **Notes**

See MS.26 above.

# MS.28 — Clear 3ds Max Memory

# **Purpose**

Various simplistic memory clean-up functions.

### **Files**

- BS-ClearMem.mcr
- BS-ClearMem.ms

### **Assumptions**

None.

#### Notes

See .ms for source references.

### MS.29 — Set Distributed Render Slaves

#### Notes

See MS.26 above.

# MS.30 — Prepare New File For Multi Color Schemes

## **Purpose**

This was an attempt to automate a new Color Scheme file from an existing, in order to reduce the time in file prep for color and geometry changes, as well as maintain the rendering, lighting, and layer settings.

### **Files**

- ms30\_prepForMultiColorSchemes.ms
  - o P:\\_misc support\- R&D\3dsMax scripts\MS.30 prep New File for Multi Color Schemes\MS.30 scripts

## **Assumptions**

A Multi Color scheme project has base geometry and site geometry prepared; as well as: rendering, lighting, and layer settings prepared to the point that a new Color Scheme is ready to be started.

### **Notes**

3dsMax had changes (after the initiating of this script) to the Manage Scene States functionality that interfered with our Multi Color Schemes script – to the point that this script was abandoned.

# MS.31 — Proxy Repath

#### **Purpose**

Re-path Proxies, based on the "bad" path, conforming to targeted path.

# **Files**

BS-RepathProxies.ms

### **Assumptions**

Only "08\_GROUPS" "SITE groups" are targeted at this time.

#### **Notes**

Not associated with a button.

Can be augmented for other scenarios.

# MS.32 — Isolate Zero-Vert Objects

## **Purpose**

"Empty" objects cause rendering and modeling problems. This scripts finds them and enters "isolate selection" mode, in order for users to determine appropriate action.

### **Files**

BS-IsoEmptyObjs.ms

### **Assumptions**

Some otherwise confounding problem exists in rendering or modeling.

### **Notes**

Not associated with a button.

# MS.33 — VRay Xref Repath

#### Notes

See MS.31 above – was intended for Xref functionality, similar to proxy re-pathing. Abandoned for other priorities.

# MS.34 — Auto Low-Poly Bake

### **Purpose**

Take existing high-poly Studio standard models, and from them, auto-generate low-poly geometry – baking lighting and color information into diffuse maps, and normal information into bump-normal maps. The resultant model should be mostly ready for importing into Unity3D. Artist attention required.

### **Files**

- BS-AutoBakeInAutoSets.mcr
- BS-CollectSetsAndBake.ms
- BS-GetObjSetBasedOnVertsRatio.ms
- BS-BakeSets.ms
- BS-HP2LP\_forBake.ms

### **Assumptions**

There are no "empty" meshes, and the scene is prepared as it intends to be taken into Unity3D.

### **Notes**

While highly automated, this is still a relatively hands-on script.

# MS.35 — Reflect Color Only

## **Purpose**

Set all VRay materials in scene to 'reflection affects'='Color Only'

### **Files**

- BS-ReflChColorOnly.mcr
- BS-ReflChColorOnly.ms

# **Assumptions**

None.

#### Notes

This can be augmented (as it is currently written) to set all VRay materials to the other options.

# **MS.36** — Batch Prepare New Library Collection

## **Purpose**

Starting from compressed source folders, extract contents, then ask user where various folders are located, and process them for Studio standard library items with proper layers, view-focus, and proxy processing.

### **Files**

- BS-BatchPrepColl.ms
- BS-DecompressFileAndGetDecompressedDirectoryName.ms
- ExtractFiles\_\_PassIn\_SourceDirAndFileNameAndDestDir.bat
- ExtractFiles\_\_PassIn\_SourceDirAndFileName.bat
- bitmapCollector.ms
  - o This one is a "built-in" file.

# **Assumptions**

The needed files are all in a .zip file.

### **Notes**

This is a complex series of scripts, including DOS .bat scripts that use 7zip.

# MS.37 — Rename Renders

# **Purpose**

Conforms VRay output renders, with studio standards.

# **Files**

• ms37\_renameRenders.ms

# **Assumptions**

May be used on its own, but intended to be called by other scripts.

# Notes

Not associated with a button.

# MS.## - ASDF

# **Purpose**

Asdf

# **Files**

asdf

# **Assumptions**

asdf

# Notes

Asdf