Worrying Too Much About Materials? Start With a Clean Slate!
AV2659

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Class summary

“I wish I could easily develop materials or better yet understand how it was created.”

“Where do I need to go in the material editor to assign an image? Ok now that I’m done how do I get back to the main menu?”

-Common statements by new 3ds Max users
Key learning objectives

At the end of this class, you will be able to:

- Know the difference between the Compact Material Editor and the Slate Material Editor.
- Navigate the Slate Material Editor in 3ds Max and/or 3ds Max Design.
- Explain wiring of node based material hierarchies.
- Easily organize materials in the Slate Material Editor.
About Your Presenter

General Information:
- Over 15 years experience in the Architecture Industry.
- BA Architecture (University of Illinois, Chicago)
- AAS Computer Graphics (American Academy of Art)

At Autodesk:
- Have been with Autodesk Consulting for 5 years.
- Specialization in BIM and Design Visualization
- Have worked with many AEC firms educating customers in both BIM and Design Visualization:
About Your Presenter

Outside of Autodesk:

- Chairs the Chicago Chapter of the Computer Graphics Society.
  - Non-Profit organization dedicated to the pursuit of Digital Art
  - Mentors students and professionals in the latest digital art techniques:
    - Modeling, Compositing, Digital Concept Art.
The Material Editor

"I wish the material editor was easier to use. It's rocket science."

- A long time ago
  Marcus learning 3DS Max 4.0
**The Material Editor**

**General Terms**

- **Materials**: Very generic term
  - Look, Color, Feel
  - Transparency, Reflectivity
  - Specularity, Texture

Really nothing more than a fancy term for a container that has flips, controls, dials and can reference image files!
**The Material Editor**

### General Terms

**Maps**: An image file.
- Can be referenced
- Can be procedurally created

- **Maps are not materials!**
- Maps are assigned to materials
The Material Editor

General Terms

Maps: An image file.
- Can be referenced
- Can be procedurally created

* Maps are not materials!
Maps are assigned to materials

What really grinds my gears!

Hrmph... grumble, grumble

So let's do our part and use the terms correctly!
The Material Editor

... so 3ds Max has **two** Material Editors

(COMPACT MATERIAL EDITOR)  (SLATE MATERIAL EDITOR)
The Material Editor

... so 3ds Max has two material editors

(COMPACT MATERIAL EDITOR)  (SLATE MATERIAL EDITOR)
**Compact Material Editor:**

- The legacy material editor.
- Not much has changed with the graphic interface.

- Assigning maps, understanding where maps are assigned a major mental challenge.

- Understanding how someone else created a material can be even a greater challenge.
Slate Material Editor:

- First introduced in 3ds Max 2011
- Introduces a node based material workflow
- Allows for a graphic material representation that allows for a more comprehensive understanding of a material, its construction & dependencies

"It's new, therefore scary; no sir, I don't like it!"
- Random user from my travels
Material Node Workflow

"Can you read a Visio diagram?"

A: Yes - Good, you already have a general understanding of the workflow!

B: Nope - That's OK. We'll start from the beginning!
What does Slate exactly do?

It's like a Visio diagram, but for materials.
Material Node Workflow

Material developed in Slate
**Material Node Workflow**

Material developed in Slate

*All nodes have outputs, not all nodes have inputs.*
"That makes too much sense, I still think it's sorcery."
- 3DS MAX student
- General understanding of Slate
- Know the difference b/w Materials & Maps
- Understand the concept of wiring
- Really like the doodles in the presentation!
Material Node Workflow

- General understanding of Slate
- Know the difference b/w Materials & Maps
- Understand the concept of wiring

Not required for the purpose of this class!
“With great power comes great responsibility!”
- Stan Lee

Practical Demonstration

- Creating a material in Slate
- Organizing materials in Slate
Questions and Answers

- Know the difference b/w the material editors
- Navigate the Slate Material Editor in 3ds Max
- Explain wiring of node based material hierarchies
- Easily organize materials in the Slate Material Editor
Thank you...

Enjoy the rest of your AU experience!!
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"Revenge of the Compact Material Editor"