Month 2, Lecture 2

# PROJECT MANAGEMENT

# From Monday

- Finish Spline modeling
- Show Illustrator example

# What we are going to discuss

- Project management
- Software management
- Scene Management
- Material management using Multi/Sub Object Materials
- Rendering

# Project Management

- Working solo vs. working in a team
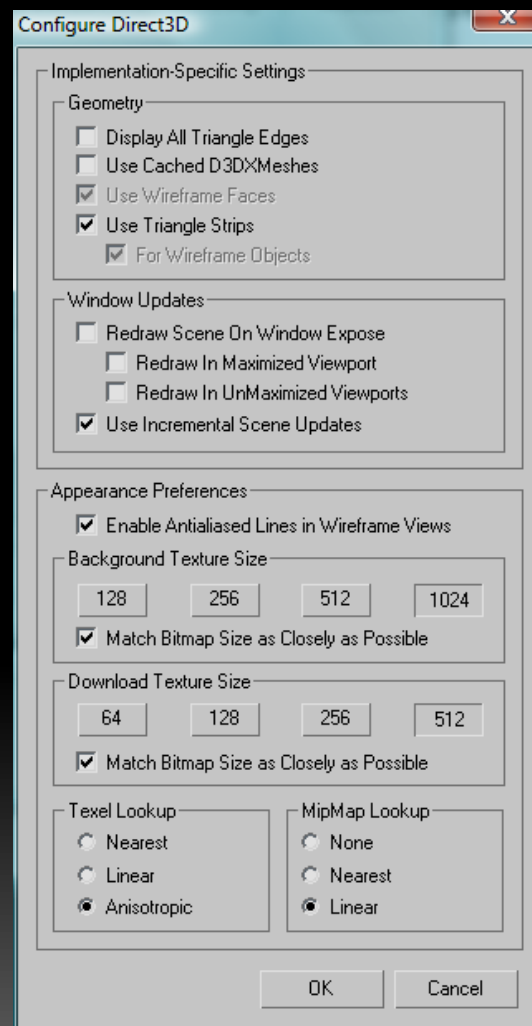- Project Folders

# Software Management

- Customization
  - User Interface
  - Viewcube and Steering Wheel
  - Paths (User and System)
  - Shortcuts and Hotkeys
  - Display Drivers

# Software Management

If you have your own copy of Max you need to do this:

- Customizing Display Drivers

- Customize > Preferences > Viewports tab > Configure Driver button

- You'll have to restart Max

# Software Management

- Display Command Panel
- Menus and Dialogs
  - Can alter the order in which things are displayed in the menu

# Software Management

- Template Scene File – saving all your settings in a blank scene that you use for each new file
  - Maxstart.max

# Scene Management

- Object Properties
- Display Command Panel
- File Operations
  - Opening and Saving
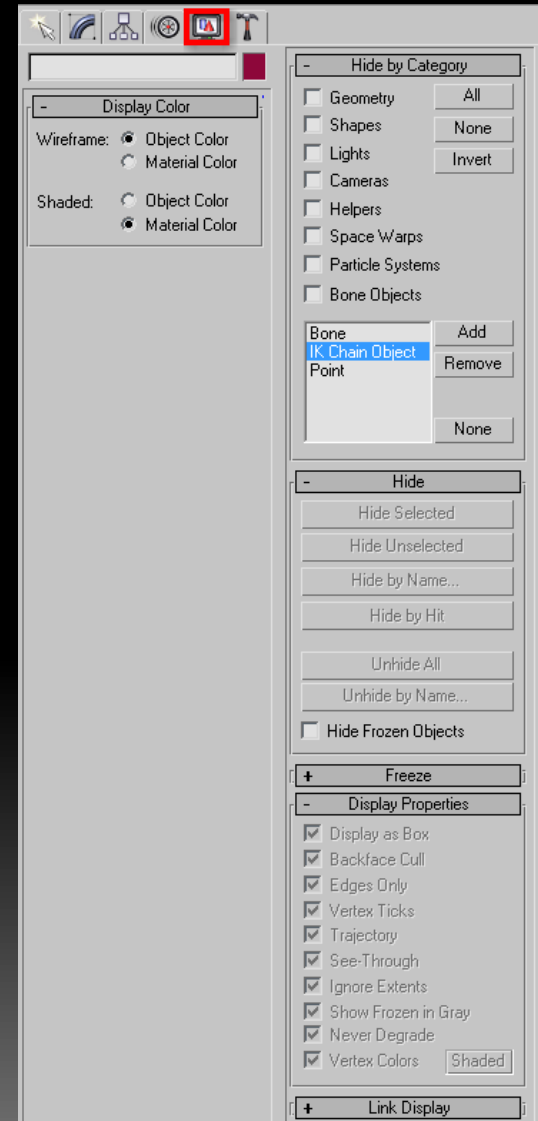  - Importing and exporting
  - Archiving

# Object Properties

- Right Click on object and choose Object Properties

# Display Command Panel

- Allows for more control when hiding and unhiding objects

# File Operations

- Saving, exporting, etc.
- Before you can make this decision, you need to know about 3D Program capability

# QUESTION: WHAT DO 3D PROGRAMS ACTUALLY DO?

# 3D Concepts: What does a 3d program do?

- Create Images
- Create Moving images (Animations)
- Create / Modify 3D Data

# QUESTION: WHAT IS 3D DATA?

# Data Formats (2D and 3D Data)

- 2 types of data
- 2D – includes Pixels (raster) and curves (vector)
- 3D - Scene data

# 3D Data Formats

- 3ds Max Aligned
  - .MAX (native)
  - .FBX
  - .3DS
  - .DWG (CAD)

- Universal
  - .OBJ (Excellent)
  - .DXF
  - .FLT
  - .ASE (ASCII - "ass-kee")

# 2D Data Formats

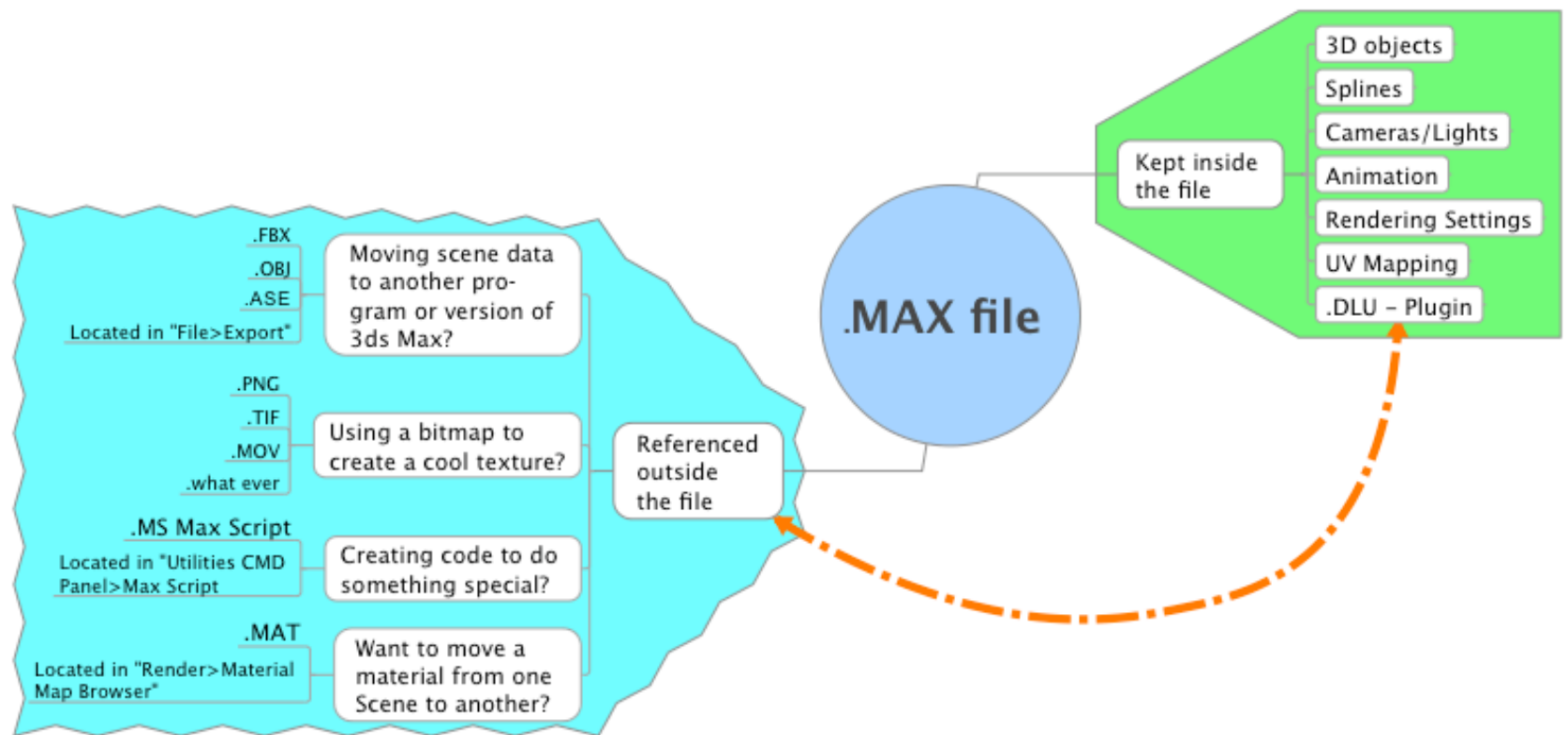- Raster
  - Image formats
    - PNG
    - TIF
    - TGA
  - Video Formats
    - MOV
    - AVI
  - Stay away from
    - JPG
    - GIF

- Vector
  - AI (can be used in 3ds Max)
  - Flash
  - CAD

# Meet the .MAX file



The .MAX file is basically a project file that holds mesh data, materials, lights and cameras, and animation.

Kept inside the file:
- 3D objects
- Splines
- Cameras/Lights
- Animation
- Rendering Settings
- UV Mapping
- .DLU – Plugin

.MAX file

Referenced outside the file

Moving scene data to another program or version of 3ds Max?
- .FBX
- .OBJ
- .ASE
- Located in "File>Export"

Using a bitmap to create a cool texture?
- .PNG
- .TIF
- .MOV
- .what ever

Creating code to do something special?
- .MS Max Script
- Located in "Utilities CMD Panel>Max Script"

Want to move a material from one Scene to another?
- .MAT
- Located in "Render>Material Map Browser"

# File Operations

# Scene Explorer

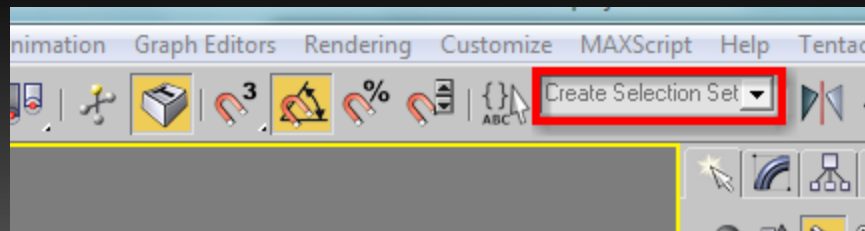- Organizational tool that allows access to many object properties
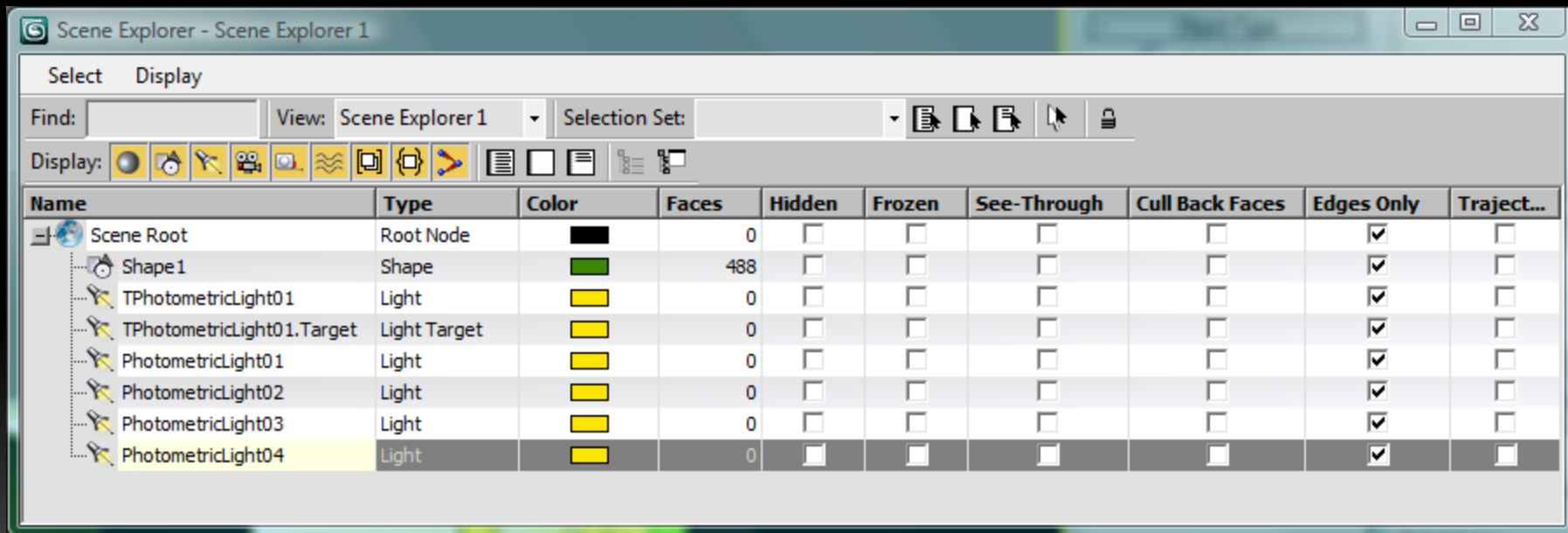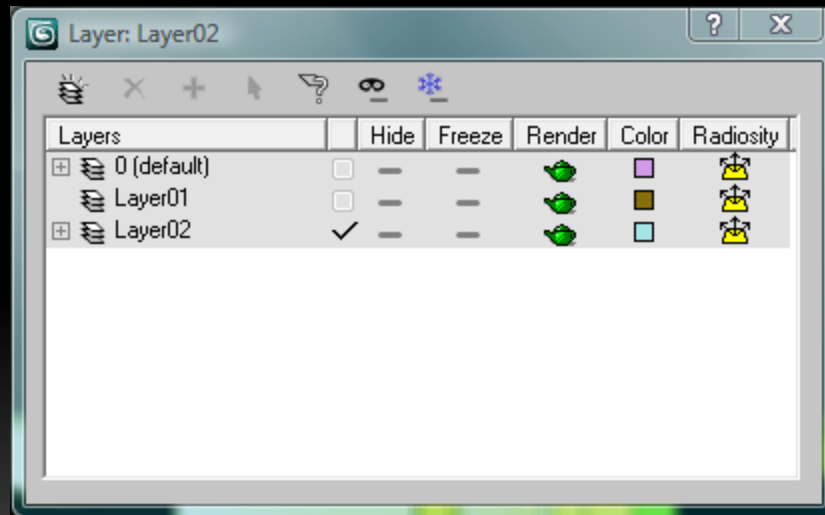
# Naming Conventions

- Always give a unique name to:
  - Scene geometry
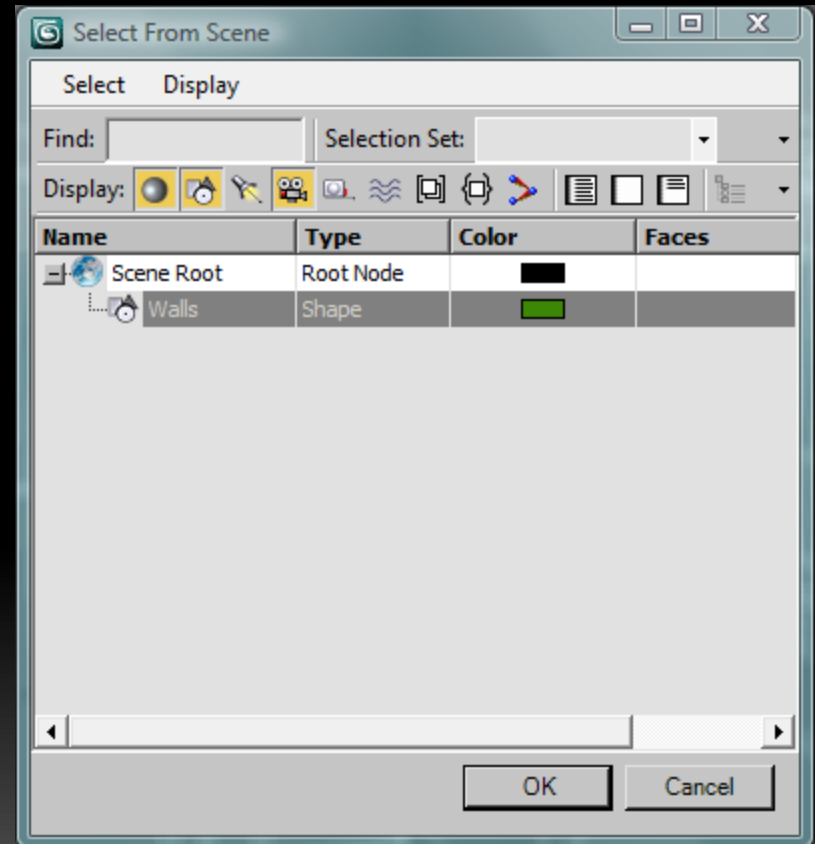  - Materials

# Selection Sets

- Quickly select objects by putting them in "sets"
- Works on objects OR sub-objects
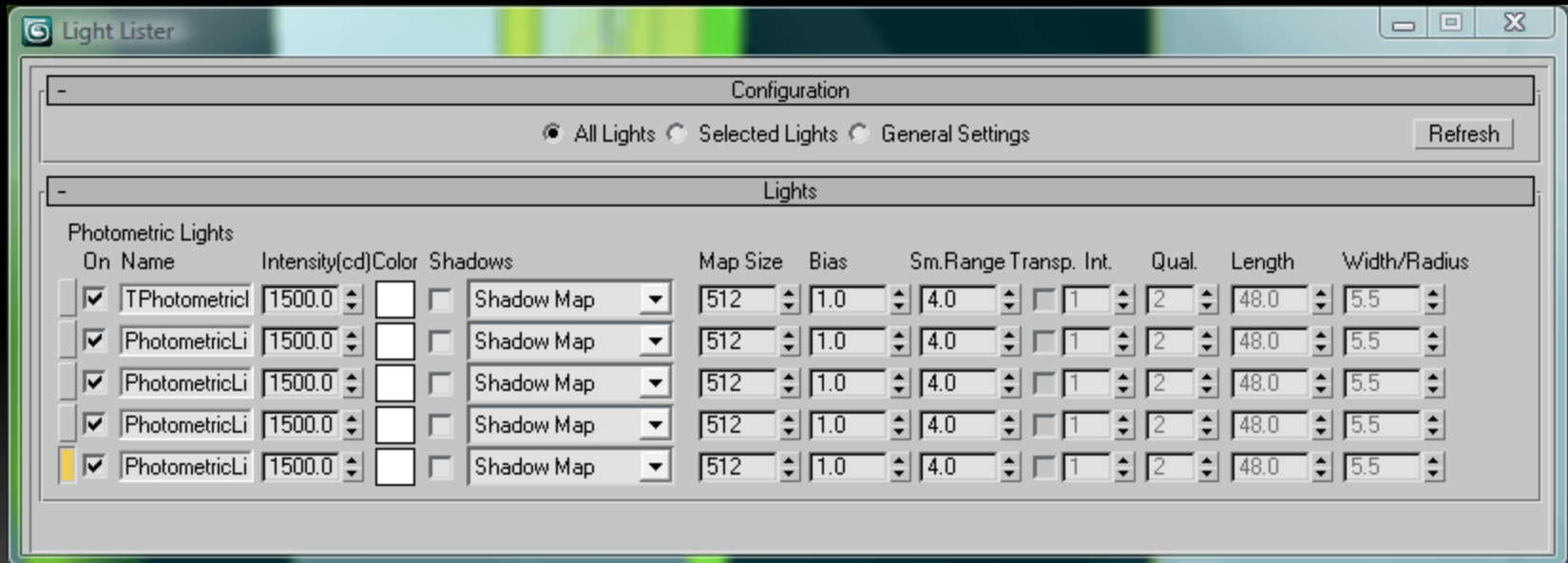- Can be edited to add or remove objects
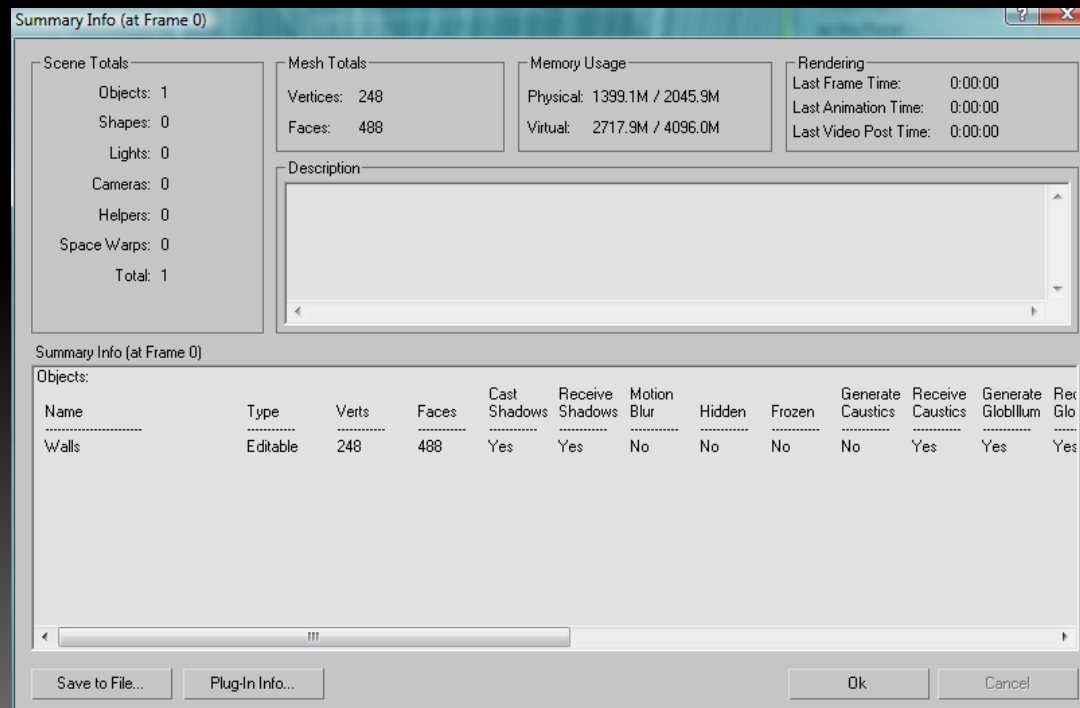
# Layers

# Select by Name Dialog

# Light Lister

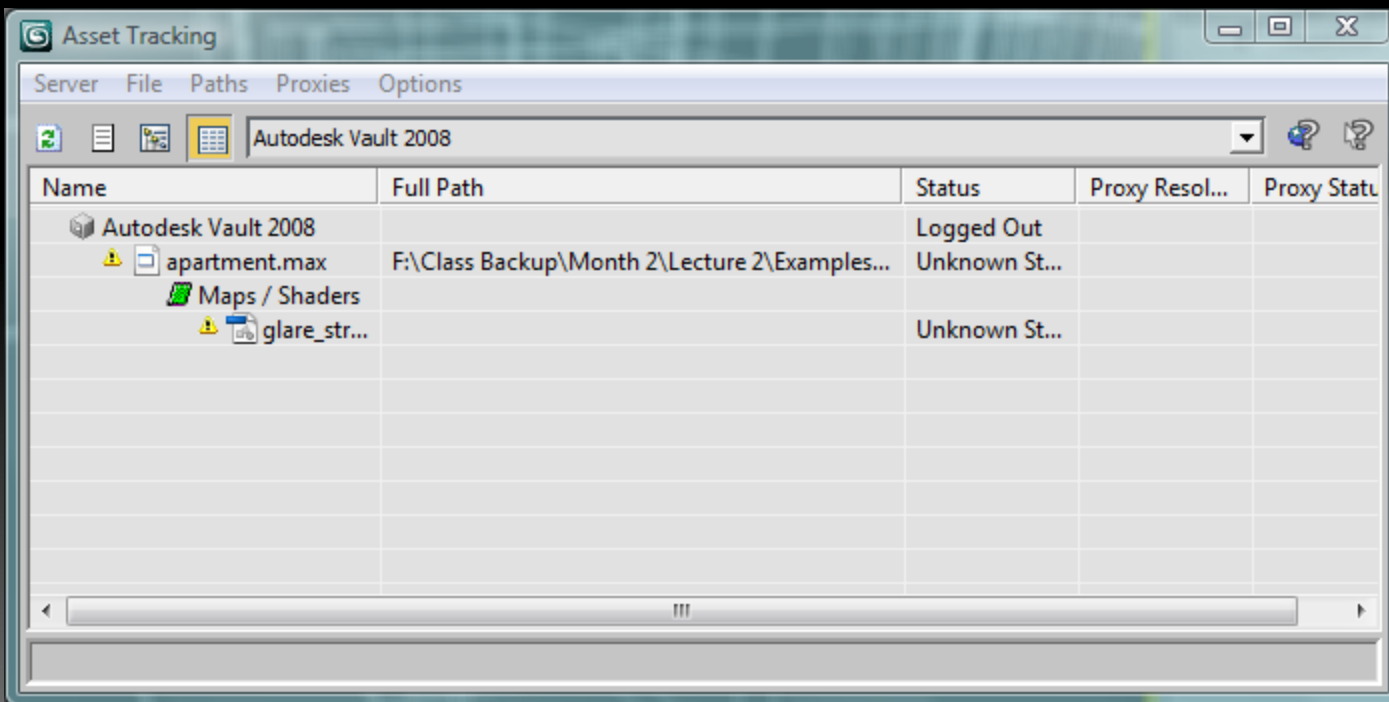- Organizational tool that allows you to change most common light options.

# File Summary

- Quick overview of everything in your file.
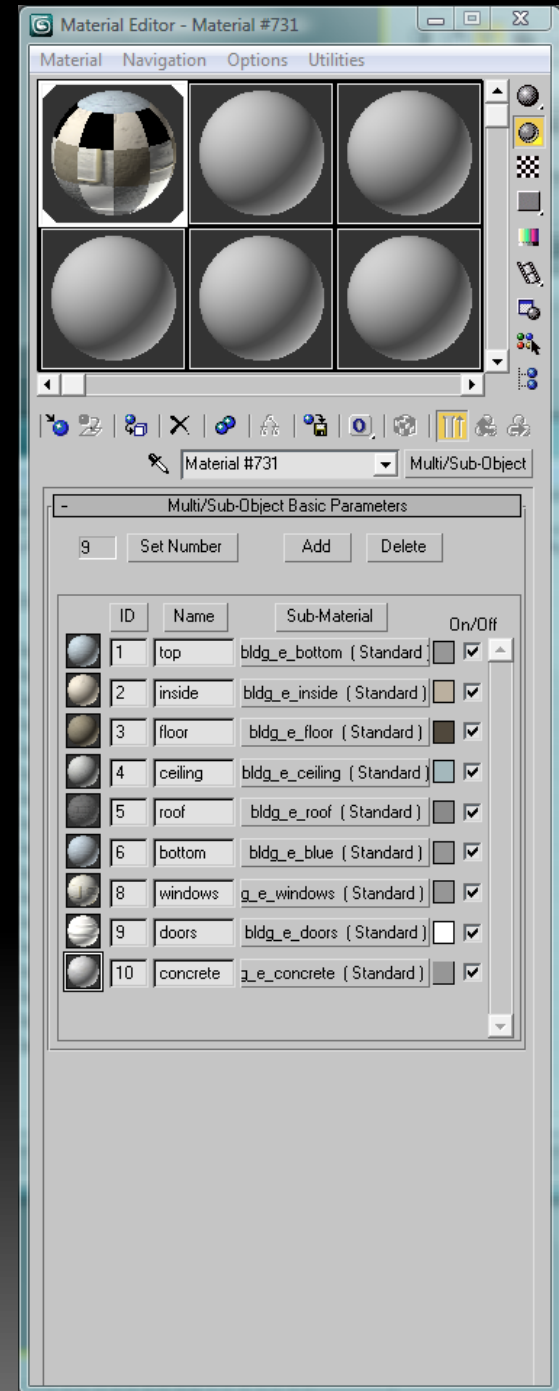  - Number of objects, lights, cameras, vertices, faces etc.

# Asset Tracking

- Shows paths of external files (texture maps, external references, etc)
- Allows you to edit paths

# Material Organization

# Multi/Sub-Objects
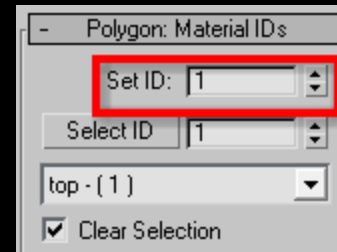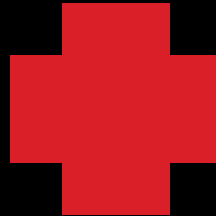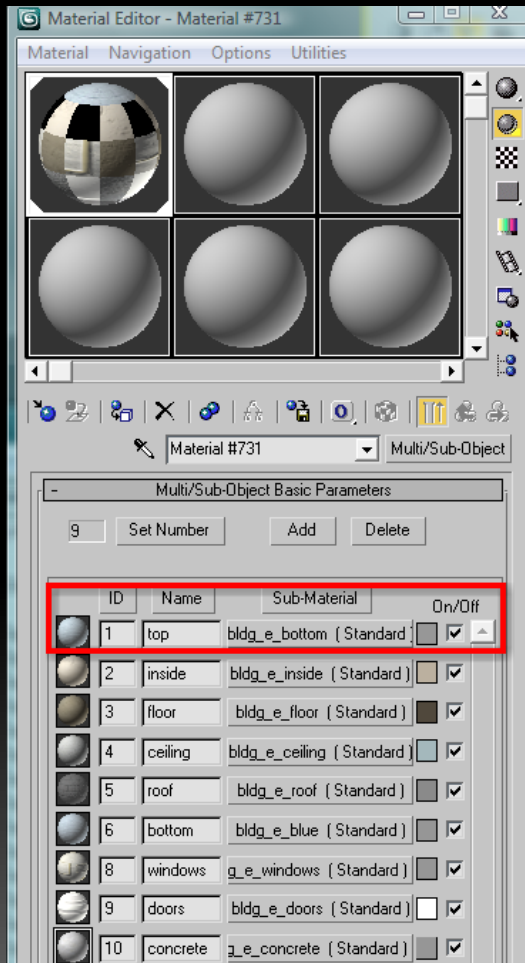
- Creation
- Control

# Controlling Sub-Objects

- Telling the computer which material is on which polygon, and what UVW Map to use.
- Simply put:
  - You only need to control 2 things.
    1. Which material (material ID's)
    2. How the material is applied  (Map channel)
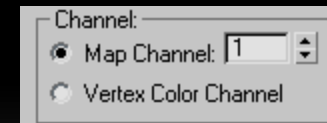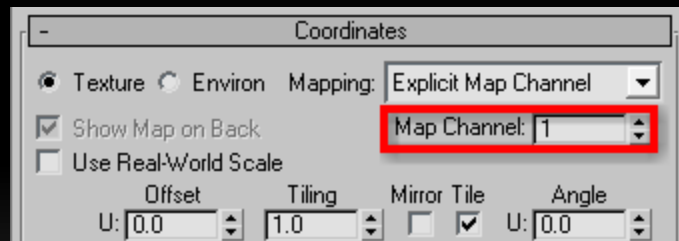- That's it. Promise.

# Material ID

- Which material from the Multi/Sub –Object Material is on which polygon

# Material ID

# Map Channel

- Allows multiple types of mapping to be assigned to different material parts.

# Material Library

- Creation
- Modification

# Bitmap Management

- Use the network
- Bitmap/Photometric Paths
- Asset Tracking
- Resource Collector

# Asset Management for the Render Farm

- Every bitmap in your scene must be in YOUR texture folder on the server

- Exception: Arch Design materials with an associated bitmap will be in Max's default folder

- Server textures are NOT an exception, copy them to your folder!!!!!!!!!!
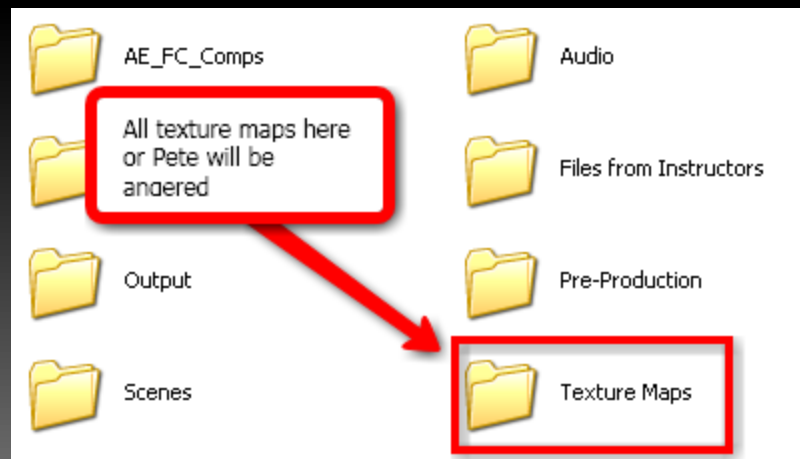
# Bitmap/Photometric Paths

- Best tool for viewing or changing all bitmaps in one spot
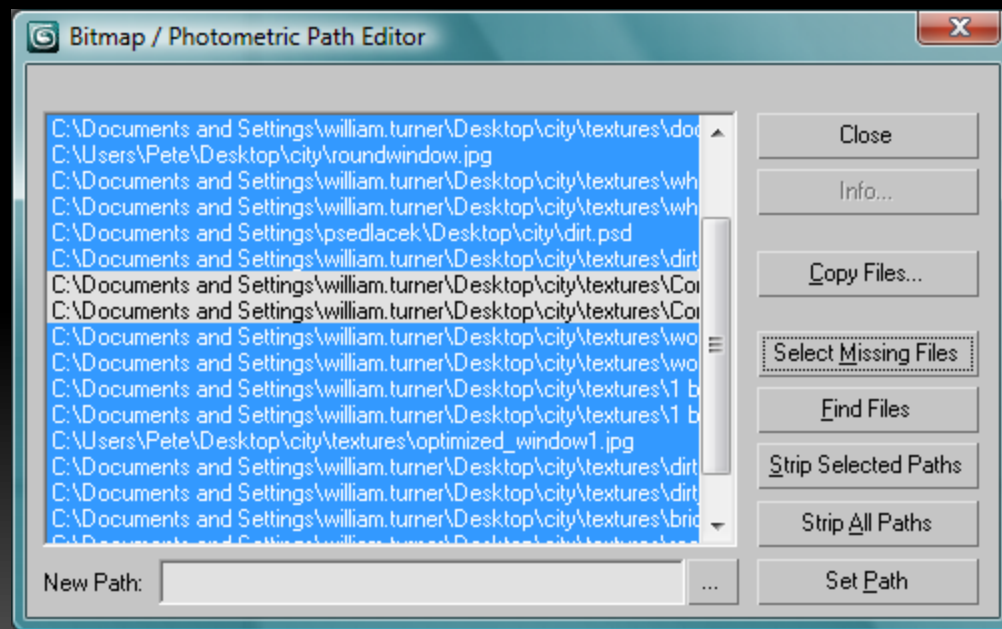
# Render Management

# Network Render Setup

- Make sure all of your files are in the right spot
- Pick what frames you want
- Pick place to save
- Render Setup > Net Render
- Job Name: Blue_LastName_FirstName
- Subnet Mask: Automatic Search off
- Replace numbers with DADR01
- Hit Connect
- Uncheck Task Blocking and Include Maps

# Sending Scenes to the Network Render / Render Farm

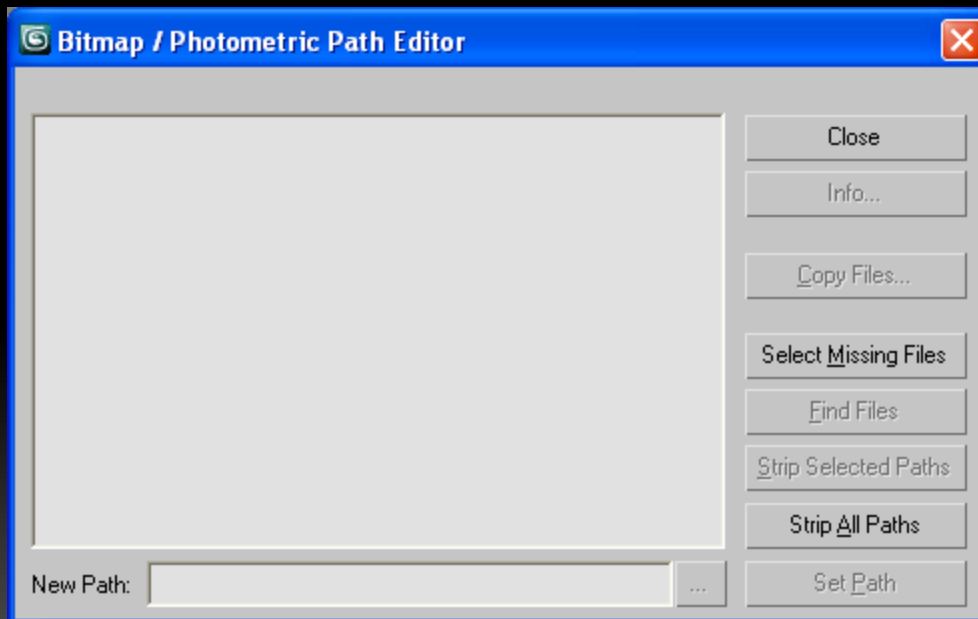- There is a tutorial on the 3AN help web site.

# Render Passes

- Separating different passes so that different effects can be added to them in AfterEffects or Photoshop

# Placing those Materials there

- Should say \\studentvfiler\3an\…
- Should NOT say X:\\studentvfiler\3an…

# What we discussed

- Project management
- Software management
- Scene Management
- Material management using Multi/Sub Object Materials
- Rendering