



# Faster! Better! Cooler!

## Turtle 4.1™ – For all your baking needs.

Turtle 4.1 is the only product on the market that combines advanced rendering technology with sophisticated baking functionality in a single integrated toolset. By integrating the baking functions into the core of Turtle, standard rendering and baking can be handled in the same way. For you, this means a better workflow while baking and the ability to bake with all of Turtle's render features.

### Renderview Baking

Baking in the viewport provides direct visual feedback. The ability to super sample, region bake, and use all other features – previously available for rendering only – makes your workflow faster and easier and lets you know exactly what you will produce and how it will look.

“The fact that you can use all the rendering power and functionality in the baking and combine it with things like PTMs makes Turtle truly a one of a kind tool for next-gen development.” JASON SMITH, CG SUPERVISOR, BURNOUT, ELECTRONIC ARTS

### Surface Transfer

Turtle 4.1's Surface Transfer takes normal mapping to the next level. This tool generates high quality maps from complex models in just a few clicks. Surface Transfer can generate normal, ambient occlusion, light, and most other maps required by next generation console development. The user-friendly interface and instant viewport previewing enable a high degree of fine-tuning and experimentation, which makes it easier to get precisely the look you're after for your production.

“The Surface Transfer in Turtle blew Maya and Max out of the water.

I highly recommend it to any CG-artist that wants to create low-poly objects that look stunning.” SIMON KIRK, LEAD ARTIST, EUROCOM

### Advanced Baking

The advanced PTM (Polynomial Texture Map) functionality featured in Turtle 3 has further evolved into a generalized light baker, which can be controlled by LUA. You can collect static, as well as dynamic diffuse light, and store this information in virtually any function basis of your choice. This information can be generated for textures (in OpenEXR format), per vertex, or at any chosen location in a given scene. There are a number of predefined output options for all non-programmers as well, making effects like Directional Occlusion Mapping, Radiosity Normal Maps, and Spherical Harmonics available to first time users.

“I am thrilled to have our team using Turtle in our pipeline, it is evolving in a very intelligent way with the artist's concerns at heart.” MICHAEL TALARICO, CG SUPERVISOR, HARRY POTTER AND THE GOBLET OF FIRE, ELECTRONIC ARTS

Picture from Mass Effect courtesy of BioWare Corp.



“Expect nothing less than fast, high quality output from this super-efficient rendering plug-in, especially tailored to satisfy games developers needs.”

VERDICT 3D WORLD BUYER'S GUIDE, OCTOBER 2006



### ◀ 1. Heavenly Sword, Ninja Theory



Wanna know what all the fuss is about? Why Guerrilla, Insomniac, Ninja Theory, Dice and all the other big game studios are using Illuminate Labs' tech for lighting and baking?

The best tool in the world for next-gen game developers. With Turtle 4.1 we have taken our Global Illumination system even further, adding powerful new multi-bounce global illumination and faster (and more beautiful) Radiosity Normal Maps. But don't take our word for it, try it out for yourself. Log on to <http://www.illuminatelabs.com/turtle/trial> for your free trial version!

#### Turtle Render Overview

- Final Gather and Global Illumination
- "Indirect Lights" to control the shape of the GI-solution
- Advanced pass system – any shader can be a separate pass
- Ambient and Reflection Occlusion
- HDRI and Image Based Lighting
- New 3D Motion Blur
- Glossy Refractions & Reflections
- Adaptive pre-tessellation of displacement maps
- Micropolygon displacement at render-time
- Render polymeshes as subdivision surfaces
- New unified Super Sampler: Combine 3D mb/glossy/DOF as efficiently as possible
- Anti-aliasing with advanced edge tracing
- Direct compatibility with ZBrush displacement and normal maps
- Lua script shaders
- Environment Map Camera
- Output shaders
- Realistic material shaders (such as Oren Nayar)
- Fast subsurface scattering with support for blocking geometries

#### Turtle Baking Overview

- Renderview Baking
- Renderview Surface Transfer
- Directional Occlusion Mapping
- Radiosity Normal Mapping
- Spherical Harmonics
- Polynomial Texture Maps
- Programmable baking
- Batch baking with adaptive texture resolutions
- Different render passes, including albedo
- Custom shader for all baking needs

#### Platforms

Turtle 4.1 is a plug in for Maya. For further details on supported platforms, go to: [www.illuminatelabs.com](http://www.illuminatelabs.com)

#### Availability

Turtle can be purchased directly from Illuminate Labs or via authorized Turtle resellers. For purchasing and evaluation information go to: [www.illuminatelabs.com](http://www.illuminatelabs.com)

1 "Turtle has definitely become the ultimate weapon for all our next generation game art asset creation needs."

HUGUES GIBOIRE – ART DIRECTOR, NINJA THEORY

2 "Turtle delivers on every level of performance that we need it to. It just works! All this, coupled with awesome support, makes this product invaluable in our pipeline."

RODERICK VAN DER STEEN – SPECIALIST ARTIST, GUERRILLA

3 "Without Turtle much of the work that goes into our realtime assets just wouldn't be apparent or even possible."

LEAD CHARACTER ARTIST, FREE RADICAL DESIGN

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