# Creativity Decoded.

Autodesk Softimage 2011 software introduces innovative new rendering and animation tools that help artists create more complex, high-quality characters and effects in less time.

This is hands down the most powerful rigging framework on the planet. When I look at traditional rigs now, they just feel so awkward and clumsy.

Phil Taylor
Independent Contractor
Motion Mechanic



Mass Effect 2. Image courtesy of Blur Studio and Electronic Arts.

An ideal companion to Autodesk® Maya® software, Autodesk® Softimage® software is a high-performance 3D application that enables artists to use intuitive, non-destructive workflows to help create stunning character animation and effects. With differentiated tools for facial animation, the powerful Interactive Creative Environment (ICE) and the multi-threaded GigaCore architecture, Softimage helps bring an innovative edge to your game, film or TV pipeline.

## The Power of ICE – Now Unleashed for Kinematics

Use the flexibility of ICE to help create advanced rigs and elements: custom inverse kinematics, constraints, spines and dynamic tails. The visual graph-based structure of ICE helps remove trial and error for technical directors and enables them to examine the construction of rigs, with a view to troubleshooting and debugging them. And, using ICE kinematics removes the need for intermediary objects as references, helping reduce complexity and speeding up the rig's evaluation. Moreover, ICE now comes with up to 100 new compounds, enabling artists to create a range of effects, from kinematics to deformations, and from particles to strand dynamics. ICE effects can even be exported to Maya.

#### More Flexible, Extensible Rendering

Softimage 2011 boasts a completely new shader authoring environment, enabling external shaders and renderers to get near instant access to powerful Softimage rendering features: Render Passes, Render Region, Shaderballs, Render Tree, and Material Manager from a single plug-in library—no need to write custom UI. Meanwhile, artists have a wider range of preset materials at their fingertips, thanks to up to 100 new mental ray<sup>®</sup> shaders, while the new mental ray 2011 renderer offers a more stable production environment and enhanced performance. Moreover, the process of rendering passes from multiple cameras is now more efficient, and frames are more easily identified with new Camera and Render Slate functionality.

#### Making Great Features Better

Softimage 2011 delivers a more complete, automated solution for facial rigging and animation, with new automatic lip-syncing in Face Robot<sup>®</sup> that enables artists to generate phonemes and visemes directly from an audio file, and use function curves to help modify their contribution. Have a Maya pipeline? No problem: you can import fully rigged Face Robot heads into Maya. Meanwhile, the latest NVIDIA® PhysX<sup>®</sup> 2.83 rigid body library from NVIDIA helps support springs and dampers for meshless deformation simulations, and offers accelerated performance with NVIDIA CUDA enabling artists to focus more on the creative process when creating and refining dynamic simulations. And finally, enhanced UV Unfold technology can now create symmetrical results, and local UV islands can be unwrapped in the Texture Editor.



Image courtesy of Janimation.

# Autodesk<sup>®</sup>



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New in Autodesk Softimage 2011 Rendering Sandbox

Technical directors, shader writers, and third-party developers can now take advantage of a completely new shader authoring environment that automatically hosts external shaders and renderers without the need to build custom shader UI or other tools.

#### **ICE Kinematics**

Harness the power of ICE (Interactive Creative Environment) to help drive the movement and behaviors of characters and scene elements. With ICE kinematics, TDs can more easily create advanced rigging elements: custom inverse kinematics, constraints, spines, and dynamic tails.

#### Automatic Face Robot Lip-Syncing

More quickly generate facial animation based on an audio file with new automatic lip-syncing in Face Robot. A dedicated view for controlling the phonemes and visemes offers function curves to help modify their contribution.

### 100 New ICE Compounds

Select from up to 100 new ICE compounds to more easily create a vast range of effects. Compounds can be used directly as presets, or as starting points or learning tools for artists creating their own ICE effects.

#### 100 New mental ray Shaders

Enhance rendering creativity and productivity with up to 100 new mental ray<sup>®</sup> shaders: .mi and .mip production shaders, that enable artists to help simulate a wide range of materials.

#### PhysX 2.83

Create meshless deformation simulations in ICE with the latest NVIDIA<sup>®</sup> PhysX<sup>®</sup> rigid body library. With new support for springs and dampers, artists can more



Studio AKA, image courtesy of BBC Winter Olympics.

easily achieve a wide range of effects: jelly-like and plastic deformation. The new library's accelerated performance can be even further boosted with the optional addition of an NVIDIA CUDA enabled GPU.

#### **Camera and Render Slate**

Show useful information in the viewport or renders: scene name, camera, render pass, and frame numbers with the new Camera and Render Slate functionality.

#### **Multi-Camera rendering**

Save time when rendering passes from multiple cameras. Now each pass can render a sequence for all cameras, helping eliminate the need to setup a separate pass or scene in order to render from another camera.

#### mental ray 2011

Take advantage of a more robust production environment, together with an overall increase in stability, and faster renders due to enhanced performance in BSP2, with the new mental ray 2011 renderer.

#### **UV Unfold Enhancements**

Create symmetrical results when unfolding, and unwrap local UV islands in the Texture Editor, with enhanced UV Unfold technology.

#### www.autodesk.com/softimage



Image courtesy of UVPHACTORY.



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