

Autodesk®
MotionBuilder® 2009

The freedom of real time.



Experience the Freedom of Real Time with Autodesk MotionBuilder 2009 Software

Production teams are discovering that not only does the real-time interactivity of Autodesk MotionBuilder software help to make animators far more productive, it puts creative control back in the hands of directors and cinematographers.

We consider MotionBuilder to be an absolutely essential tool, always ready for any shoot. If you work with mocap data, MotionBuilder is what you want to be using because if you try another package not designed specifically for mocap data, it's going to be a complete headache. MotionBuilder lets you quickly and nondestructively edit animation to create cycles, cut things down, and a lot more. There isn't any other software that offers the ability to do that.

—Matthew Stoneham
Senior Technical Artist
Sony Computer Entertainment
Europe

Autodesk® MotionBuilder® 2009 software gives animators, technical directors, and moviemakers high-quality, interactive visualizations within the 3D viewport, and much more.

Simulate in Real Time

Use real-time collisions to prevent characters, objects, and other scene elements from interpenetrating, or dynamically create a character falling and hitting the ground with the new rag doll solver. The ability to produce rigid-body dynamic simulations in MotionBuilder adds a new level of interactivity and realism to your animations.

Extend, Customize, and Integrate

Use Python® scripting language to quickly build custom tools that facilitate the process of integrating MotionBuilder with your pipeline. MotionBuilder 2009 provides vastly improved Python script development capabilities.

Interact with Sophisticated Scenes

Create advanced lighting effects to increase the subtlety and realism of your scene, and see those same lighting effects displayed accurately in the MotionBuilder viewport, even as you interact with the scene in real time.

Autodesk MotionBuilder 2009 Key Features

Rigid-Body Dynamics

You can now set up a real-time, rigid-body simulation using the 3D objects within your scene. Take advantage of support for real-time collisions to prevent interpenetration of characters, objects, and other scene elements, invaluable for those looking to efficiently edit 3D animations involving characters interacting with objects.

Rag Doll Solver

The addition of a new rag doll solver enables you to simulate complex interactions between a character and its environment that would be time consuming and difficult to animate using traditional keyframing or motion-capture techniques. Such interactions could include a character falling and hitting the ground, for example. This simulation is applied to the character's control rig and can be mixed with existing animation data (for example, mocap data of a character wildly waving its arms) or poses for increased realism (the same character waves its arms as it falls).



Image courtesy of Radical Entertainment

Enhanced Hardware Shader Support

Autodesk MotionBuilder 2009 provides support for new hardware-accelerated CG shaders*, including the Light Attenuation shader and the Normal Mapping shader, which delivers real-time display of normal maps created in Autodesk® Maya®, Autodesk® Mudbox™, or Autodesk® 3ds Max® software. MotionBuilder now also supports version 2.0 of the CgFX library, so you can take advantage of the latest CgFX shader technology.

Interoperability

The addition of SteeringWheels™ and ViewCube™ navigation technology provides a more consistent navigation experience as you switch between MotionBuilder and other Autodesk products. MotionBuilder 2009 also delivers enhanced support for workflows involving MotionBuilder and the Autodesk 3ds Max Biped software, as well as the Autodesk Maya full body inverse kinematics (FBIK) character rig.

Performance/Support for Windows 64-Bit

This release of MotionBuilder extends support to the 64-bit Intel® and AMD®-based Windows® platform, including the Windows Vista® Business 64-bit operating system. Use the software on a 64-bit platform and benefit from significant performance improvements, including the ability to address considerably more memory (up to 128 GB for Windows XP 64-bit, for example). This capability means you can handle larger and more complex scenes and improve performance since swapping is no longer necessary.

Python Scripting

An intelligent, fully integrated Python editor enables you to develop, test, and refine your Python scripts in MotionBuilder. The editor supports single and multiline entry, tabbed workspaces, line numbering, color coding, history, hotkeys, drag-and-drop capabilities, color-coded error messages, and searching. You also get deeper access to MotionBuilder functionality through exposure of rendering codecs, the FCurve % function, control rigs, and loading/merging of characters.

* Shaders supported on NVIDIA® graphics cards only.



Image courtesy of Crytek GmbH



Image courtesy of High Moon Studios



Image courtesy of Harmonix Music Systems

A key benefit of MotionBuilder is that it lets you take the best parts of each live take, combine them, and edit them using the MotionBuilder story tool—thereby giving the director one perfect take. All the layout camera work is done post capture, and the director can experiment until he loves it. MotionBuilder lets him do this in real time, viewing and changing his camera on-the-fly.

—Corey Turner
Technical Animation Supervisor, *Beowulf*
Sony Pictures Imageworks

Learn More or Purchase

For more information and a complete list of features and enhancements in Autodesk MotionBuilder 2009, visit www.autodesk.com/motionbuilder.

Autodesk offers a wide range of 3D and 2D solutions to artists, production and game development facilities, and design studios looking to fully experience their creative ideas. These solutions include Autodesk® 3ds Max®, Autodesk® 3ds Max® Design, Autodesk® HumanIK®, Autodesk® ImageModeler™, Autodesk® Kynapse®, Autodesk® Maya®, Autodesk® MotionBuilder®, Autodesk® Mudbox™, Autodesk® Stitcher™, Autodesk® Toxik™, and Autodesk® FBX® software applications and technologies. For more information about the entire Autodesk 3D and 2D product portfolio, visit www.autodesk.com/me.

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