



After 10 revisions, Maxon Cinema 4D has blossomed into nothing less than a state-of-the-art rendering and animation system. Results can be seen in thousands of productions—on TV as well as movies such as *Spider-Man 3*; *The Chronicles of Narnia: The Lion, the Witch and The Wardrobe*; *Monster House*; *Fantastic Four*; and *Superman Returns*. The program owes part of its charm and legacy to its fast rendering abilities, extensive plug-ins, and dynamite output. It doesn't hurt that Cinema 4D is fairly easy to jump into and use.

But all this comes at a price. The program is a bit expensive as it stands, and adding two or three plug-ins (also offered by Maxon) could strain the budget of many studios and boutiques. However, it's a worthy investment, because Cinema 4D is one of the best 3D programs currently shipping for both Mac and PC. This new dot-five version adds a host of new professional features.

One test of any 3D program

The Maxon Cinema 4D content browser lets you look through scenes and objects on your drive easily. The top window showcases some of the many lighting options.



Maxon Cinema 4D R10.5

is its "figure-it-out" factor. Can you jump in without documentation or prior knowledge and start to develop, render, and animate a project? With Cinema 4D, you can. Maxon has continually revised the interface (very notably when it reached version 10) to make the icons color-coded and easily recognizable and to put the menus where you would expect to find them.

Standard operations work as they do in other programs such as Adobe Photoshop and After Effects. You have a layers palette that lets you work on specific objects without disturbing others, and a keyframeable timeline works as you would expect it to. Customizable interface layout presets are built around animation, painting, modeling, etc., so you can switch the program's interface around to focus on what you are doing. The ease of getting into the program makes it very appealing to video production people who may be first getting into 3D.

New professional animation features added to easy-to-use industry favorite.

REVIEWER: FRANKLIN MCMAHON

Maxon knows that to expand its market share, it needs to appeal to the masses and the constant refinement of the interface makes it digestible for video producers who don't have a long history of working in 3D. Couple this with knockout renders that look amazingly professional, and it's a program choice—without a steep learning curve for smaller- and medium-sized production houses—that delivers million-dollar budget output.

As for features, Cinema 4D does not disappoint. For working with files, you have a con-

The RayBrush feature allows you to paint an object directly while viewing reflections,

tent browser that generates thumbnails of scenes and objects so you can visually search and browse. Interaction with other programs is very extensive; every major 3D format is supported, including Autodesk 3ds Max, Newtek LightWave 3D, Adobe Shockwave 3D, Wavefront Explorer, as well as just about all variations of bitmap and vector (including EPS and Flash). Modeling is extensive, with a generous supply of primitives as well as every polygon tool imaginable. Recently, I was able to bring in some animated backdrop objects I had sculpted in 3ds Max and import them directly into Cinema 4D. The objects came through perfect, allowing me to use the powerful rendering of 4D using existing objects. This interplay between 4D and other programs is important to video producers who want to repurpose or re-animate existing objects. I recently had a client who wanted a logo animation for a web project. Having already animated the object in 3ds Max, I was able to bring in the logo object and, in 4D, render it out as a Flash SWF animation. Having this one-click option to export to HD-video format or Flash-web format on the fly is especially compelling to video people who want to cover all the new media bases.

One of Cinema 4D's strong points is texturing—achieved via 3D paint, UV (texture map) editing, and extensive texture materials. The program's RayBrush feature allows you to paint an object directly while viewing reflections, bump-mapping, and transparency in realtime. The program ships with hundreds of brush options that provide natural media looks as well as special color and texture effects. If you want, you can also paint in 2D and then see changes applied immediately to your 3D scene. You can perform projection and UV painting, where you brush on a texture and Cinema 4D takes care of all the tedious work of lining up edges and joints. Now organic meshes wrap more cleanly, making them better aligned than before. Cinema 4D achieves this by relaxing the UV meshes to eliminate overly angular transitions.

Lighting is top-notch, with one-click creation of spots, flares, area lights, environment (sky/sun), and volumetric lights. All the light-

ing options have tons of tweaks and parameters. Cinema 4D also offers some lighting options you would not expect—such as shadow color, lens parameters, and light noise.

Rendering in Cinema 4D continues to be speedy, with support for multiple processors, hyper-threading, and multicore. Even if you don't have a tricked-out machine, you will still be amazed at how fast the program renders a scene.

If you want to extend the program, a range of plug-ins called “modules” are available from Maxon. One of my favorites is an Advanced Render plug-in that does ultrarealistic ambient occlusion, sub-poly displacement, pyro clusters, smoke, fire, advanced skies, volume caustics, and glows. I just used this plug-in to create some sky backdrops for a client animation, and the results were stunningly realistic.

Mocca 3 is a plug-in for easy character joint animation. Hair offers one-click options for every imaginable hairstyle. MoGraph is for creating/cloning multiple objects for motion-graphic backgrounds. Other available modules include Thinking Particles, Sketch and Toon, and Net Render. Most of these are in \$300-to-\$600 range; the only problem is that you'll want several, because they have such extensive features and options.

In the new 10.5 version of Cinema 4D, Maxon has added features to improve your workflow. The timeline has been redesigned to include relative keys. This allows sequences

to be elastic—meaning you can change the length without changing the timing. That's perfect for slow- and fast-motion sequences. A summary track is now included to show an overview of all hierarchical keyframes and timing on a per-object basis, which is handy for large, complex scenes.

Now in Cinema 4D, you can finally cut and paste data between dif-

ferent timeline views. You can also employ the new keyframe reducer to smooth out unnecessary keyframes, such as a large number that have been imported via motion-capture data. Often, you can simplify the f-curve (thereby reducing the number of frames) and still get the desired movement. The program now can do this without requiring tedious manual keyframe elimination.

One of the cooler new options is the HUD

▶ bottomline

Company: Maxon

www.maxon.net

Product: Cinema 4D R10.5

Assets: Easy-to-use interface, fast rendering ability, high-quality output, visual browser, redesigned timeline includes relative keys.

Caveats: Amazing plug-ins and HTML-based help system not included.

Demographic: Industry professionals who produce motion graphics and animation program.

STARTS AT \$895



(heads-up display). You've seen these a lot in Apple pro apps specifically. You click on an object, and up pops a translucent heads-up display with parameters. Cinema 4D amazingly lets you create your own. Just drag a parameter from the sidebar to your scene work area and a HUD is created. You can combine often-used commands into a single HUD, adjust the color of it, and even have the HUD follow an object element. If you had a HUD of joint commands, you could attach it to a character so that when the character is relocated within the scene, the HUD moves along with it.

There are new modeling and sculpting tools in version 10.5, including a new Spin Edge command for manipulating angular lines without introducing unwanted geometry deformation. You can now use a new Connect command for attaching sides to square objects (and then just as easily disconnecting them). Xrefs, or external references, aid in large team projects. Basically you'll have the master scene that everyone is working on, but now you can break off individual elements, objects, and sections so that one team member can work on them. Once the individual work is saved, it is updated to the master file seamlessly.

Cinema 4D is a first-class tool that's capable of producing amazing-looking output. Its learning curve is not as steep as it is for many of its competitors. The shipping package comes with almost 20 hours of training videos—a welcome feature that every 3D program should offer. Video producers don't have time to read through phonebook-sized manuals; we media artists are a visual people. So the extensive training videos are perfect for video producers who want to gain new skills late at

night and unleash them during the production workday.

One of the new 10.5 features is a program-wide, HTML-based help system. A great addition, but my 10.5 install did not include it. I tried to import it, but I could not find it in the Maxon folder on my hard drive. I am sure with some Google exploring I could find a fix, but it seems odd that there's an Install Documentation menu option, but no clue as to where or what the file is.

Other than being a little “help-less,” there is little I have to complain about Cinema 4D. The program has so many features it will do just about anything you ask of it. Video producers will absolutely marvel at the high-quality output this software is capable of producing. With any luck, you should be able to raise your rates after investing in 4D. Don't take my word for it though; try it for yourself. You can download a free demo for Mac or PC at www.maxon.net. If you already own a leading 3D program, check if you are eligible for a competitive-upgrade discount price.

It is unfortunate that some of the dazzling stuff has been broken off into addition plug-ins that you need to buy. It's nothing that you can't live without, but it would be nice, for example, to have some of the advanced rendering modules come standard. Plug-ins such as Hair are amazing, though. So if you need to accomplish a specific task and there's a plug-in for it, you will not be disappointed. My advice is to start with the basic package and expand if you need to. The price is a tad steep, but you can make it back easily after one client project. And the dazzling results you produce will ensure that word gets around. □