



CREATE SOMETHING NEW

MODO 901 represents our most significant update so far.

With a new advanced photorealistic viewport, progressive texture baking, physically based materials and support for vector-based graphics, MODO 901 helps you get the high-quality look you want. There is also a host of new and improved modeling, sculpting, painting, texturing and UV tools—not to mention the integration of the award-winning MeshFusion for consistently better Booleans. In animation and effects, we've added more flexible rigging and new procedural Shatter and Rock items. And, with accelerated performance, complexity management tools and new pipeline integration options, MODO 901 lets you take on more challenging projects than ever before.

KEY FEATURES

Advanced photorealistic viewport

Iterate faster in a high-fidelity context that closely reflects your final render, with MODO 901's new hardware-accelerated photorealistic viewport. Powered by The Foundry's CLEAR technology, the new advanced viewport lets you manipulate geometry and materials in a real-time setting that accurately displays lighting and shadows, BRDF materials, reflections, gloss, screen-space ambient occlusion, high-quality transparency, anti-aliasing, supersampling and a number of 2D post-processing effects.

MeshFusion

Now a fully integrated feature of MODO 901, MeshFusion takes away the challenge of complex and frustrating Boolean operations, making it easier to consistently produce high-quality models. You can interactively intersect, add and subtract subdivision surface (SDS) objects, control the blending between, and intuitively edit the assembly instructions. MeshFusion also comes with a library of preset primitives that you can use to construct your object; final output is a watertight mesh suitable for further editing in MODO or export to .STL.

Vector-based graphics support

Make use of resolution-independent vector-based artwork created in a program such as Adobe® Illustrator® or converted

System Requirements

Officially supported operating systems

- Windows 7 or Windows 8 (64-bit only)
- Mac® OS X 10.8 or later (64-bit only)
- Red Hat Enterprise Linux 5.4 or later (64-bit only)

Minimum hardware requirements

- Intel processor(s), Core2Duo processor or higher
- 10GB disk space available for full content installation
- At least 4GB RAM
- Display with 1280 x 800 pixel resolution
- Internet connection for product activation and online videos access

The Advanced viewport mode requires an NVIDIA or AMD graphics card with at least 512MB of graphics memory and drivers that support OpenGL 3.2 or higher.

from a CAD file with new support for SVG (Scalable Vector Graphics) files, together with a new Curve Fill polygon type. You can use SVG artwork in your MODO scene as texture files, or as curves that can then be manipulated in 3D, or act as a framework for you to construct meshes. Edited vector compositions can also be exported back out as SVG files for use downstream in the design or manufacturing process.

Progressive baking

Texture baking in MODO 901 goes to the next level, with a new technique that takes advantage of MODO's progressive renderer. Using a ray tracing methodology, you can preview your textures as you bake, and watch them refine progressively—allowing you to tweak settings and make surface changes without waiting for a final render. The result? Faster iterations and an overall better baking workflow. In addition, you can now directly bake normal maps with Mikk and other custom tangent spaces for compatibility with a wide number of games engines.

Accelerated performance

With a major focus on improving performance on large scenes, MODO 901 accelerates workflows across the board—including selecting, displaying and deleting many items, or changing their type—in some cases by orders of magnitude. In other specific examples, animating deforming subdivision surfaces is now significantly faster, thanks to the new support for the OpenSubdiv library, while the progressive renderer now employs several techniques to provide faster updates. What's more, new sampling techniques improve rendering performance with many direct lights and light linking.

Enhanced modeling toolset

MODO 901 brings a number of enhancements to its renowned modeling toolset: the ability to work with models that are topologically but not spatially symmetrical lets you work on both sides of a posed model at once; the Slice tool now offers the option to automatically cap the resulting meshes; and you can now fill a four-sided region with a grid pattern of quads. Other enhancements include new Linear and Radial Align tools, a Twist option for the Curve Generator tool, improved edge loop selection options, slicing across multiple edges, and more.

Improved UV workflows

Enhanced multi-tile UV workflows in MODO 901 include the ability to pack UVs across multiple tiles at once, a new UDIM Indicator that displays various information about the current tile, and UDIM support within many tools and commands. Other new UV features include the ability to copy and paste UVs based on topology, straightening options for the UV Relax tool, and a UV Rectangle command to align strips that have a regular grid pattern.

Better multi-resolution sculpting

Multi-resolution sculpting in MODO 901 now supports layers, so you can have multiple sculpt layers at each mesh level; displacement values from all the layers are blended together into the final result. In addition, you can now transfer multi-resolution displacement vectors to an active mesh from a background mesh, helping you exchange data with third-party sculpting applications, create a new starting point from a high-resolution template, or prepare a mesh for animation.

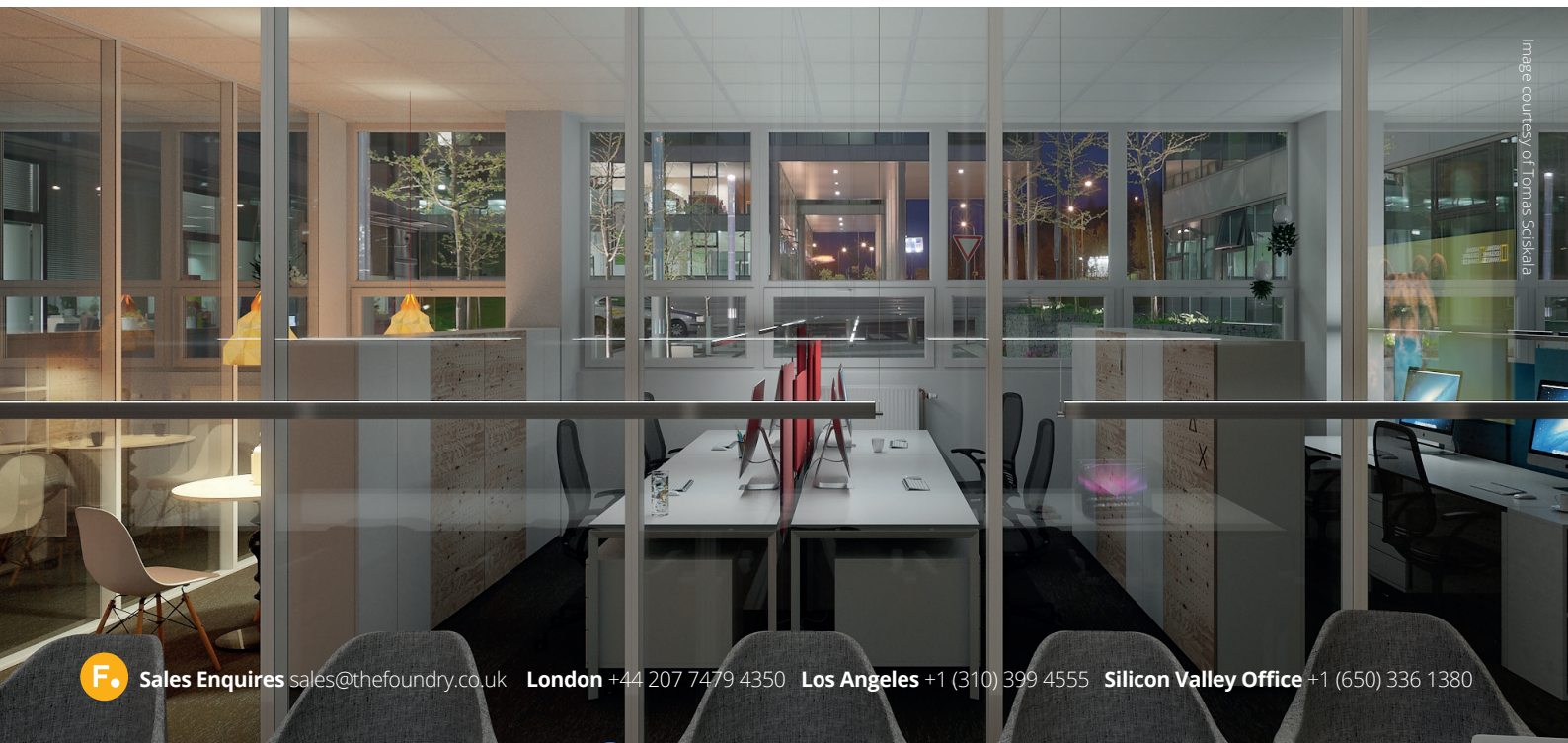


Image courtesy of Tomas Sedskala

Extended dynamics and effects

MODO 901 helps bring your worlds to life with new dynamic and procedural effects. A new procedural Shatter item lets you automatically shatter meshes based on collisions, while a procedural Rock item lets you add natural-looking landscape detail to your scene. For rigid-body simulations, the ability to set up and control glue constraints is now much easier, while all dynamic simulations can now be saved and loaded as separate external cache files.

More flexible rigging

Creating cleaner, more flexible rigs for characters and other assets is now easier in MODO 901. With new Command Regions, you can create clickable controls from any polygon selection; controls become visible as you mouse over the selected region, keeping your rig uncluttered. In addition, a new Tension texture lets you drive values based on surface deformation; this can be combined with the new ability to drive sculpt layer opacity through a modifier, for powerful rigging possibilities.

Easier pipeline integration

Aimed primarily at technical directors, MODO 901's new TD SDK offers an easier and more intuitive interface to the existing Python API for writing plug-ins. MODO 901 also brings Qt support to Mac OS X and Windows—already available on Linux—so TDs can make cross-platform custom UIs. And, with support for OpenVDB voxel datasets, and a projection shader that enables digital matte painting workflows with NUKE, MODO 901 plays well with other applications in your pipeline.

Complexity management

MODO 901 delivers tools to help you manage today's complex assets more easily. The new Deferred Mesh item lets you offload assets to disk, loading them only at render time; simple proxies or bounding-boxes represent the item in the scene with minimal memory impact. Other complexity management features include the ability to mass-convert scene image clips to Tiled EXRs, and better ways to expose only selected inputs in assemblies.

Improved painting and texturing

MODO 901 delivers faster, higher quality painting, with better blending, interpolation, stroke evaluation, subpixel sampling and brush orientation during drawing among the improvements leading to a superior overall experience. In addition, a new option in the Parametric Ink tool lets you use surface parameters to vary the opacity of the applied paint, while a new texture switch node and wireframe shader extend texturing possibilities.

Physically based materials and rendering

MODO 901 now offers a new choice of BRDF material—GTR (Generalized-Trowbridge-Reitz)—that better matches specular highlights on real materials, and offers control over blurry reflections. The material is fully compatible with the new advanced photorealistic viewport. In addition, MODO's physically based Daylight model has been updated to provide a more realistic, physically accurate environment.

UI and viewport enhancements

In the sometimes overwhelming world of 3D, MODO 901 puts the tools you need at your fingertips with the ability to store and recall 3D viewport settings as presets and a switcher bar for easily selecting favorite layouts. In addition, you can now choose to display UV edge seams and boundary edges with different colors in the 3D viewport.



Image courtesy of Rockmed

“MODO 901 is a juggernaut! MODO delivers for us, in a single package, what all the other competitors at twice the price cannot. It models better, sets up easier, previews faster, renders more beautifully. No other package can compete with MODO as a holistic viz solution—you buy it, start working and everything is there. MODO just delivers. Out of the box. Without compromises!”

Jonathan Josenhans,
Managing Director, edelVIZ