# TouchCAD 3.5.1 released

TouchCAD is based upon the concept of not only designing 3D-shapes, but also upon converting such shapes into something possible to fabricate physically. It does so by unfolding / unwrapping just about any shape. The 3.5.1 update is a maintenance update, though it also contains several new features and improvements. The new features are also demonstrated in a movie found in the News section of touchcad.com



*Easy to use QuickTime animation features*

## Rendering and animation

There are several new rendering and animation features. A few examples:

• Support for generating QuickTime Animations in sizes suitable ranging from being shown in mobile phones to full video sizes including HD TV resolutions. The generation of animations is controlled by a dialog box, which is made visible from a button displayed in Render Mode.

• Support for fog effects using the background color as fog color. Light colors can be used for simulating fog or atmosphere, dark colors to simulate shadows, or any color to generate a more artificial looking colors.

• The Lights dialog box is now also available in Render Mode by clicking on a button in the Mode bar.

• Adjustable fog clip distance using the Hither tool, and edge hardness using a slider.

• The Lights dialog now supports adjustable colors, power, and spread. Lights can be adjusted dynamically in Render Mode.

• Support for background images in the rendering area. Note that 100% white objects are treated as invisible to allow for example stand-alone figures in the model. The Edit Background Image and Import Background image dialogs now include a Depth property used for specifying the location of the background image relative to the 3D model.
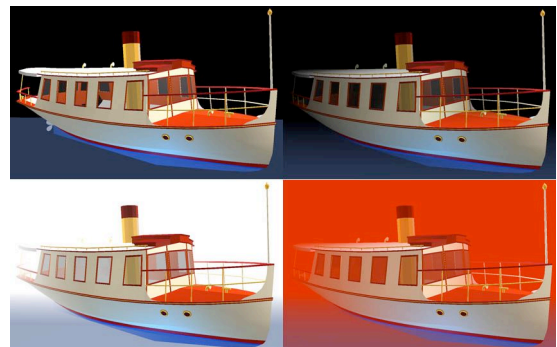


*Dynamic fog features. Shown above, from top left, No fog, black fog, white fog, red fog. Below showing adjustable fog smoothness.*
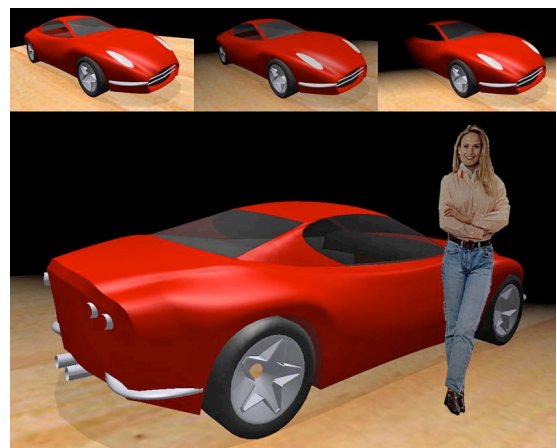


*Support for including background images in Render mode, above inlcuding a floor and human shape figure.*

## Editing

• Two new items in the Object Info palette (Properties Tab) allows applying of so-called hard points to TouchCAD rulers. Hard points are essentially hard breaks in an otherwise smooth looking ruler curve, for example to allow a sharp change in direction. It is also possible to break a ruler into a hard edge perpendicular to the rulers in a surface being defined as Smooth / Smooth in the Object Info palette.

• Measurements are now shown dynamically close to the cursor as you drag. The dimensions of the selection box are now displayed close to the Intersection Point. This also applies to the Unfold view. Holding the cursor over the beginning of the dimension text and clicking initiates a numerical change by taking you directly to the Reshape dialog box. Note that the cursor changes, and when you click, the Reshape dialog occurs.

• The Tab key can now be used for entering a dimension numerically. If you for example start drawing a line, just press the Tab key and a dialog occurs where the length /width or diagonal length /angle is specified. This applies to all objects that can be drawn using the Click-Click method, for resizing the Selection box, or for rotating objects.

• The Unfold view now comes with a nesting guide area, used for nesting unfolded panels to fit into a given material width or to simulate the size of the cutting machine. To activate it, check the Nesting Guide item in the Show In Unfold menu item (View menu). To set the dimensions, select Guide Settings... in the Show In Unfold menu item (View menu).

## Image unfolding

• The Image Unfold dialog now specifies the size of the image generates in the dialog, and it allows you to split the image into pieces, to allow you to generate single images bigger than the 50-million pixel limitation imposed by QuickTime.

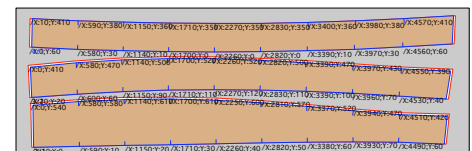## Mac version Universal Binary.

• The Mac version is now Universal Binary, that is, it runs at full speed on both PowerPC and Intel based Macs.

## Technical data

TouchCAD needs Mac (Classic / OSX) or Windows (2000 / XP). 500 Megs of RAM, 266 MHz processor or better. QuickTime and OpenGL installed. USB port. Tutorial movies are included.



*Hard point*

*Hard curve*
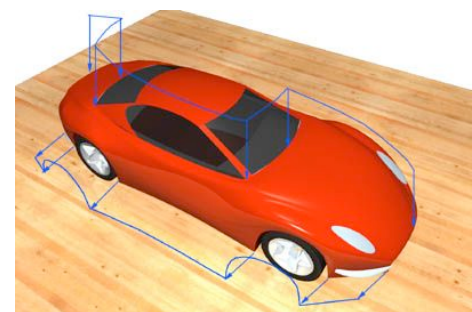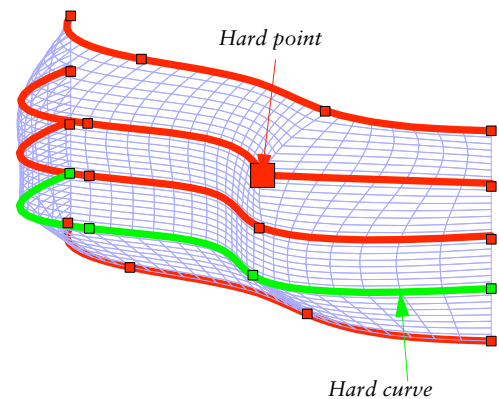


*Hard point examples in car body*



*Nesting area*