Give it a .wrl

VERSION Max 2
COVERS Using Max to create VRML models
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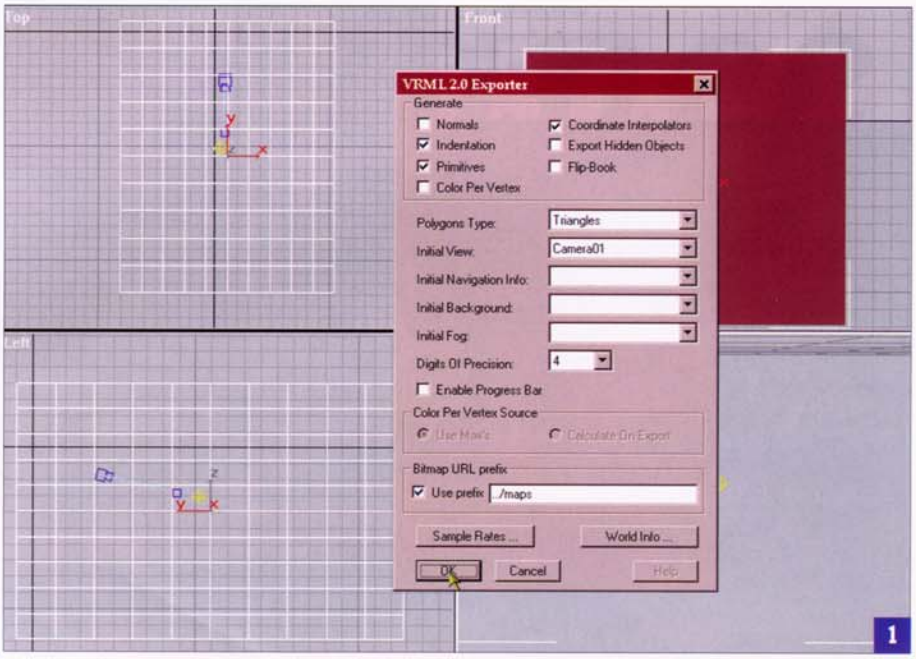

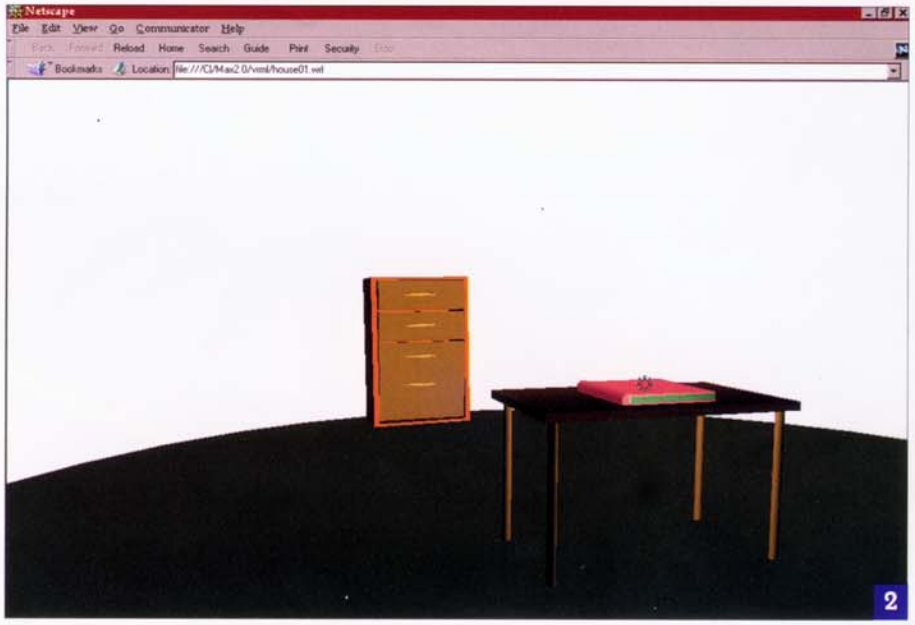

As a web medium, many people seem to have left VRML for dead. If you were to ask most web designers about VRML they would shrug their shoulders and say that it is, at best, not good. Too bandwidth intensive and with all the aesthetic value of a 1980s arcade game. This is about to change – VRML is set to take off once again – and 3D Studio Max is part of the reason why.

The major problem with pure VRML – as the codeheads at the VRML consortium will tell you – is that it's very code intensive and most of that code is co-ordinates. Creating a box is easy enough, but several boxes that have a particular position in 3D space ups the finger work by several thousand lines of code. So the good people at Kinetix have put in the VRML 2.0-compliant VRML helpers to save both our minds and fingers from overload.

The fundamentals are pretty basic: build a model in Max and export it as a .wrl file, then view it in Navigator or Explorer with a VRML plug-in such as Cosmoplayer 2.1. What is harder is making sure the file size will enable it to run across the Internet and not have a download time of several days. The trick is achieving a balance between model sophistication and the size of your .wrl. We'll start by building a house as our VRML world – create a box and stick a camera in it. The size of the box is almost immaterial in Max – the scale is taken from the camera, the camera is 'you' in the VRML world, so the camera window works as a sense of 'what you see is what you get'.

Just to see how easy this is – export the box model, call it house.wrl (you have to type in the extension .wrl otherwise Max will not recognise the format) and when the VRML exporter box pops up you can go with the default for now (picture 1). Make sure that the Initial View is set to Camera01 (unless you've renamed it out of habit) and click OK. Open the .wrl file in your browser of choice and you've created your first VRML object (picture 2).

Next add some models to your room, a table or chair, keep the models fairly simple and their polygon count down. Do some Boolean extracts for windows and you can add glass if you like. Put in a door and animate it so that it opens – your choice on out or in. Make it run across 25 frames or so. Name all of your objects and models.

Look at the Helpers in Max and select VRML from the menu. What the helpers allow us to do is add functionality and interactivity to our Max models and create environments. There is a finite number of VRML helpers that Max allows us to use, but they are the most important for the creation of realistic interactive worlds.

Click on TouchSensor and create one in your model (picture 3). Once created, click on Pick Trigger Object and select your animated door or any other object (pictures 4 and 5). Nothing very interesting happens in Max, but export it to a .wrl file and open it in your browser. Browse around your room and you should notice that the cursor changes as you move the pointer over your door.