Rendering

CX 7/7.5 - Settings changes - Why does my v6 model render differently in v7?

Substantial improvements and enhancements were made in the Design 3D CX 7 renderer which may result in the need to adjust some render settings on older files.

-The Detail settings used in 6.x may not be adequate for 7.. Renderings in version 7. works better with smaller/tighter detail settings such as 1x7 or 2x2.

-Adaptive sampling for GI is another important change, which can be easily overlooked. The raydiosity render engine now uses Adaptive sampling for samples which are likely to fall in shadow regions. This can speed things up quite a bit, but if not set carefully can result in GI artifacts, blotchiness, etc. This will be most detectable in darker regions, especially in interior scene.

When a file is opened from 6.x, look in the Shadow channel. The Adaptive sampling value there governs both GI and raytraced soft shadows. Each scene is going to tolerate this value to varying degrees.

Start with a value of 1.0. You'll note that the new Raydiosity renderer preset sliders automatically adjust this value. The 'Better' middle values set it to .35.

-Blurry reflections and blurry transparency - the Adaptive Sampling parameter in the Details dialog primarily governs the new blurry reflections/transparency system. You can adjust this up or down, higher values let the renderer throw out more rays which will give you faster renderings, but at the expense of blurry reflection fidelity.

Lower values approaching zero create more accurate reflections but will be somewhat slower. However, the new blurry reflection code overall is faster and more physically accurate than the 6.0. The blurry reflections are going to take some getting used to, primarily because the range of blurriness was completely remapped.

On page 21 of the Texture PDF of the Art & Science of Design 3D 7, you'll find a bluriness conversion chart which is a general guide. For instance, if you change a 6.2 material from Conical to Smooth, the Smoothness value will need to be adjusted. Use the chart to convert. You'll find that you'll be using values much lower than would have been used in 6.2.

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