

Spherical Renderings

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Tutorial for creation a Quicktime Virtual Reality (QTVR) movie per VfR spherical camera.

Introduction The creation of a full 360° spherical Panorama can be done very simple in VfR: the camera must be placed in the middle of a room (image (2)), for example in typical hight of the huma eyes (image (3)) and at the VfR camera options must be selected "spherical" and "override FOV" with 360° (image (4)). Ready to render. The camera control can be set "visible" per right mouse button click on the viewport name.

- (1) Rhino3D example scene - a photo exhibition:

- (2) Scene in Top view:

- (3) Scene in Front view:

- (4) Camera options for 360° spherical renderings:

Image (5) show the downscaled Panorama rendering. Attention: some QTVR creation tools need images ratio of 2:1. The original render size of the example is 1600x800.

- (5) 360° Rendering:

The conversion of the panorama image to a QTVR can be done per different tools, for example per free tool PanoCUBE. The PanoCUBE? files contain a "script.txt". Here can be set some parameters for the QTVR like the output size or image quality. My experience is, that the height of the movie should be not higher than the half hight of the rendering. So, the QTVR show per default the image pixels without up or down scaling (a scaling of the QTVR window stay possible). If the rendering is 1600x*800*, than the created movie size should be not bigger than *400*x300 (4:3 QTVR output ratio).

- (6) Creation of the QTVR per free tool 'PanoCUBE' - drag&drop of the rendering to the PanoCUBE?.exe:

- (7) Screenshot of the QTVR :

- QuickTime Movie (400k)

At the world wide web can be find much panorama tools. For example this website provide a html code creation for publish per Java viewer - <http://www.0-360.com/publish.asp>.