



Anticipated Features Raises Capability for Realism and Image Quality to the Next Level.

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## Latest Redshift Release Features Random Walk and Volumetric Anisotropy

**Bad Homburg, Germany – July 27, 2022** - Maxon is pleased to announce the immediate availability of Redshift 3.5.05 which includes Random Walk and Volumetric Anisotropy; two long-awaited features that give artists the ability to achieve a wider range of looks with their renders, bringing the quality of their imagery to the next level of realism.

### What is Random Walk?

Subsurface scattering (SSS) is an advanced rendering technique that simulates light passing through mostly opaque objects (i.e., skin or marble).

Random Walk is a newer, more accurate path-traced subsurface scattering model that captures detail and light interactions much more accurately. Random Walk accounts for the shape of the model and its distance from a light source as the light rays scatter and explore the medium. It considers an object's volume; more accurately representing the thickness of its surface as light rays travel through them. For this reason, Random Walk is better at simulating thin and curved objects, as well as preserving fine details than older SSS methods.

### **What is Volumetric Anisotropy?**

Volumetric Anisotropy is when light rays scatter in different directions due to the composition of a volumetric medium. For example, clouds on average exhibit a forward scattering anisotropy due to the water and ice molecules suspended inside of the volume; whereas hard materials like marble exhibit backward scattering. Being able to control this value lets you achieve a wider range of looks to volumes found in the real world. Until today's release, Redshift's Volume shader only supported isotropic scattering; meaning light could only scatter equally from all directions and artists could not control the scattering direction. This control is necessary to achieve certain looks for some types of volumes.

Volumetric Anisotropy OFF | Volumetric Anisotropy ON

Redshift 3.5.05 is immediately available via Maxon App or from the [Downloads section](#) of the Maxon website.

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Publicly listed since 1999 and quoted on the MDAX and TecDAX, the company achieved revenue amounting to EUR 681.5 million and an EBITDA of EUR 222.0 million in 2021.

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