

Internet Requirement

When rendering using 3Delight Cloud, scene elements are automatically synced to the cloud and images automatically returned (on screen or to a file). For this to work efficiently, a good internet connection is needed. Typically, 50 Mbps (upload and download) gives you very good performance. It would still work at 10 Mbps, or even 1 Mbps, but it will slow things down and you will feel it. Larger studios may need 1 Gbps or more to render multiple sequences simultaneously using hundreds of thousands of cores.

Internet upload speed – for syncing scene data

Depending on the size of your scene data, your rendering speed will be affected by how long it takes for 3Delight Cloud to upload your scene elements to the cloud. If you have a slow internet connection, or render a large scene, this can be slow the first time you render. But after a first render, you can expect this to be fast because 3Delight caches your scene data in the cloud. And if you make changes in the scene, or if objects are animated, only what has changed or is animated will be uploaded in subsequent renders.

Note: Cached data are automatically flushed after a period of inactivity - this is presently set to 1 month.



The process of uploading large scenes to the cloud may also be CPU intensive on your computer — especially if you have a fast internet connection. Typically, a 4-core computer is required to fully saturate the upload capacity of a 50 Mbps internet connection.

Internet download speed – for receiving image(s)

As this is done simultaneously with rendering, this is a non-issue (does not affect time) as long as your internet speed can keep up with the rendering. An important factor here is the size of the image being rendered. For example, an image rendered with several layers of AOVs needs faster internet to be received at the same rate as the rendering.

For interactive renders, a too slow internet will create a lag (i.e. the rendering will be completed while the images is still progressively displayed on your screen or saved on file). For best performance (quick feedback) in interactive renders, it is recommended to deactivate unnecessary AOVs and use 8-bit or half-float image format. This is just to make sure your internet connection is not the bottleneck.

For batch or sequence renders, your internet connection speed will directly dictate the rendering speed as 3Delight Cloud will determine the number of cores to use to saturate the download capacity of your internet.