

Rendering in Chaos Cloud

This page provides information about submitting render jobs to Chaos Cloud from V-Ray for Revit.

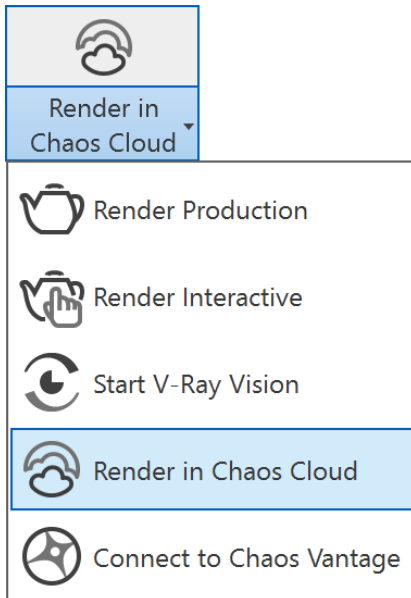
Overview

Submit render jobs to [Chaos Cloud](#) easily and directly from V-Ray for Revit's interface.

Chaos Cloud requires installation of the Chaos Cloud Client application. For more information, please visit the [Installation of Chaos Cloud Client](#) page. Adding a new version of a previously submitted job is quicker than the initial upload. Chaos Cloud compares every new job to the existing ones, and if there is a match the client app uploads only the changes. This is useful for making a new iteration of an existing scene and is why it's recommended to keep your jobs in Chaos Cloud while working on them.

UI Path

[[Revit Ribbon]] > **V-Ray** tab > **Render** panel (dropdown menu) > **Render in Chaos Cloud**



Submitting Render Jobs

V-Ray for Revit provides in-built integration with [Chaos Cloud](#), allowing for submission of render jobs to the cloud directly from Revit, using the dedicated **Render in Chaos Cloud** button. The button is located on the [V-Ray Ribbon](#). To see how batch rendering works in Chaos Cloud, check the [Batch Render page](#).

Select the **Render in Chaos Cloud** button to send the currently opened scene to Chaos Cloud for analysis.

Once the scene is successfully analyzed, you have to finalize some of the settings of the render job before it starts rendering in Chaos Cloud rendering.

Submit job

Select project

Cloud Project

Name

VRay_Animation_project

Resolution (px)

Match scene

Width (px)

640

Height (px)

480

Aspect

Pict

▼ Output naming

<name>

VRay_Animation_project

<render element>

Render element

<####>

4

Output type

Render mode

Output format

Frames range

0-10,15-16,20,22

Frames

1



CUDA CPU Override

Please note, when you enable the CUDA CPU Override machine without GPU hardware and will render with C significantly longer time to complete rendering.



Upload only

By enabling the Upload only option the job will be uplo stay Paused till it's manually resumed.



Quick tip

To check if the output meets your expectations cor

re-check if the output meets your expectations, or
a still image, and a small frame range if your scene

Cancel

Sub

Submitting an animation

Submit job

Select project

Cloud Project

Name

VRay_Image_project

Resolution (px)

Match scene

Width (px)

1820

Height (px)

1024

Aspect

Wid

▼ Output naming

<name>

VRay_Image_project

<render element>

Render element

Output type

Render mode

Output format

Job credit limit

0



Upload only

By enabling the Upload only option the job will be uploaded and stay Paused till it's manually resumed.



Quick tip

To check if the output meets your expectations, create a still image, and a small frame range if your scene

Cancel

Submit

Submitting a still image

The output image types that you are able to download by rendering in Chaos Cloud are JPG and the file type you have specified in the settings of your scene. These settings are customized in the 3D application you use for designing your scene. If you don't specify anything in the 3D application, Chaos Cloud rendering generates an EXR image beside the JPG one.

If you have enabled the **Include additional JPG output** toggle in the Options page, Chaos Cloud rendering generates an additional high-quality JPG file for your output at no extra cost. * - see the **Known Issues** section for a disclaimer.

When submitting a render job requesting TIFF and/or TGA images as a result, the results might be unexpected as not all TIFF and TGA settings are exported to Chaos Cloud rendering.

Note that the supported output image formats by Chaos Cloud rendering, regardless of the host application, are: *.png, *.bmp, *.tga, *.hdr, *.sgi, *.rgb, *.rgba, *.jpg, *.jpeg, *.exr, *.pic, *.tif, *.tiff and *.vrimf.

When rendering animations, **Frame Range** and **Frame Step** parameters appear.

Frame range – Specifies a frame range to be rendered. You can specify non-sequential animation frames, e.g. 1-3,7,9,12-15.

Frame step – Specifies a frame step in the frame range for rendering. For example, writing 8 in the Frame step box will render every eighth frame, hence the eighth, the sixteenth, the twenty-fourth, etc. Note that the first frame is always rendered.

The cost for rendering a still image job can be limited by using the **Job Credit Limit** setting. *For more information, see the [Credit Limit section](#).*

By enabling the **Upload only** option, the job is uploaded to Chaos Cloud rendering, but it stays **Paused** until manually resumed.

The [Chaos Scans](#) material library is hosted in Chaos Cloud rendering and is kept up-to-date. This means that Chaos Scans materials do not have to be uploaded each time, making scene submission significantly faster.

When ready, click the **Submit** button. When you are presented with the following message, your render job is submitted successfully, and it will start rendering in the cloud. If there are available resources in the cloud, Chaos Cloud will start rendering immediately. Otherwise, your job will join a queue and will automatically start to render when resources become available.

A screenshot of a confirmation message. It features a light gray rectangular background with the text "Job is successfully scheduled" in a bold, green, sans-serif font.

Job is successfully scheduled

A blue, rounded rectangular button with the text "View Job" in white, bold, sans-serif font.

View Job

Clicking on **View Job** redirects you to the **Projects** tab of Chaos Cloud. There you can monitor the status of your render jobs, download them, organize them in projects, resubmit, or delete them. For more detailed information on these topics, see the [Managing render jobs in Chaos Cloud](#) page.

Known Issues

When the **Include additional JPG output** option is disabled, this is not reflected in the Submit and Clone job screens. This does not mean that the option is still active. This is a known issue which will be fixed.

Render Engine Overrides

When rendering a V-Ray GPU job, the CUDA CPU Override option allows you to override the render engine to render with CUDA on CPU only. This can be useful when:

- there is no GPU hardware available to render the V-Ray GPU job
- the 16 GB of memory, available on the GPU hardware that Chaos Cloud rendering uses are not enough for the job to render

When Chaos Cloud rendering detects that there is no GPU hardware available, it shows a warning that asks you whether you want to wait for GPU hardware and gives you an option to use another command which:

- Stops the rendering of the current job
- Clones the current job and sets the **CUDA CPU Override** option to **ON** so the job renders only on CPU

When the job is rendered, you can see whether it is a V-Ray GPU or a V-Ray job in the Job Details. If it is a V-Ray GPU job, Chaos Cloud rendering shows whether it has rendered only on CPU.

State

Completed

Download size

153 KB

Resolution

640 × 480 px

Render mode

Bucket

Noise threshold

0.01

Samples limit

5041

Submitted

11/12/2020, 11:08:20 AM

Render engine

V-Ray GPU CUDA 5.00.05

CUDA CPU Override ⓘ

Render time

1 min 1 sec

Output naming

bucket_gpu.<render element>

Spent credits

0.009

Job credit limit

Off

Output Naming Convention

Upon job submission, you can choose the naming convention of the output file(s). You can find the following options in the Output naming panel:

<name> – Specifies the main name of the output.

<render element> – Specifies the position of the render element(s) in the naming convention, if there are such.

<###> – Specifies the padding of the frame's number. This option is available only for animated jobs.

Using the arrows, you can move the position of each name component to customize the output name(s).

If there are free resources in the cloud, Chaos Cloud starts rendering your job immediately. If there are no free resources, your job joins a queue and starts rendering automatically when resources become available.

Submit your jobs alternatively through the Standalone Chaos Cloud application and any command-line interface. For more information, please visit the Submitting render jobs to Chaos Cloud page.

Footnotes

- Currently, rendering of animations is not supported.
- .vrimg is a Chaos proprietary file format used by the V-Ray Frame Buffer to store the rendered image incrementally (bucket by bucket) while rendering in full floating-point format, with all available render elements. It is used as a render output but it is not recommended to use it as a texture file format. VRIMG contains metadata, i.e. render statistics. It supports dynamic bucket size.