



Earth Studio for WorldViewer

Overview

Google has created Earth Studio a power new tool for creating linear content (movies) using Google Earth. This guide illustrates just how easy it is to make content in Earth Studio and incorporate them into WorldViewer.

Earth Studio

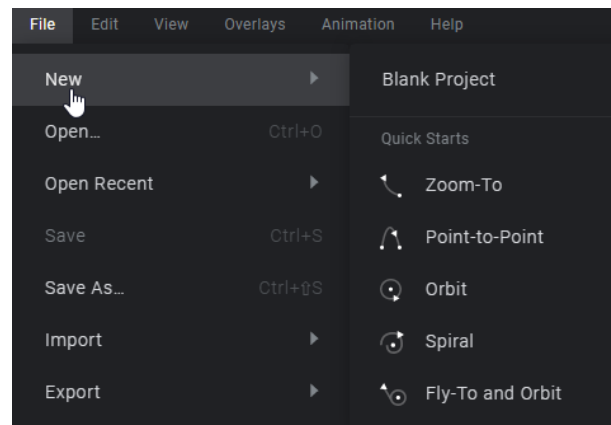
You must first create a Earth Studio account. Navigate to [Google Earth Studio](https://www.google.com/earth/studio/) and select *Try Earth Studio*.

Once you have an account open a new project. Earth Studio offers several templates. These are nice because Google has incorporated many of the subtle tricks to camera *targetting* and *easing*.

Elumenati Origins was created with Point-to-Point which allows up to 6 unique locations, flying from one to the other.

The Spiral template is good for an overview of a single location (ie. Machu Pichu).

We recommend exploring these templates before actually rendering your first movie.



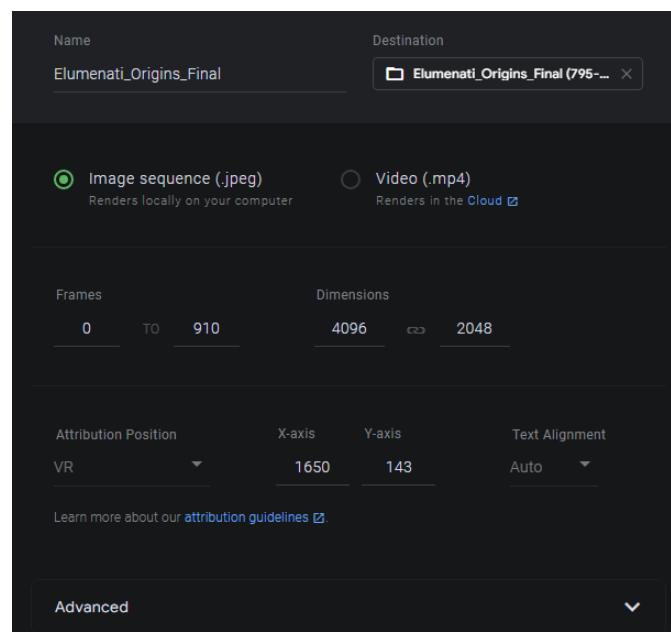
Google has an excellent manual located here: [Earth Studio Documentation](https://www.google.com/earth/studio/docs/)

Render Your Movie

In order to bring your Earth Studio content into WorldViewer you must render it. Luckily Earth Studio offers a 360° Spherical output option.

When you are happy with the content preview, select the Render tab. Here you choose to render locally or in the cloud. We have tried both and the cloud rendering is yet reliable. We recommend rendering an image sequence locally.

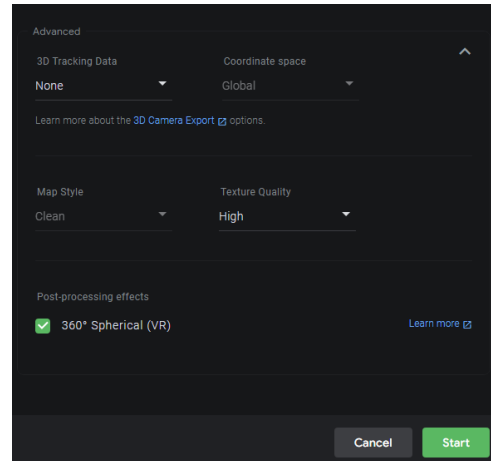
Select the frames you want to render and use the HIGHEST resolution available (4096x2048). We found the default attribution location to be the best.



Next open the Advanced settings. Here is where you set the output to be 360° Spherical. We also recommend using the HIGH texture quality setting.

With all the settings completed, select Start. You will be prompted to select an output folder and to give Earth Studio permissions to use it.

Depending on your internet speed rendering all frames will take quite a while. Elumenati Origins is 910 frames and rendering took roughly 30 minutes.

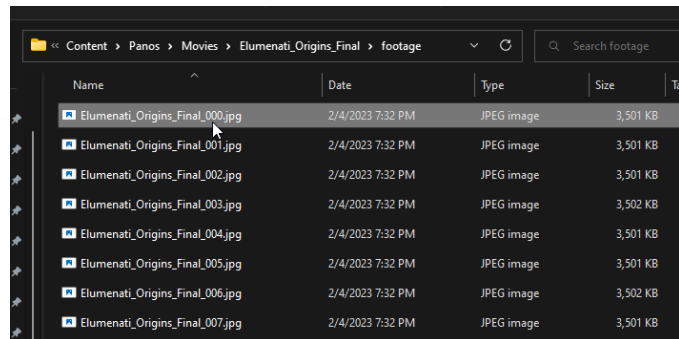
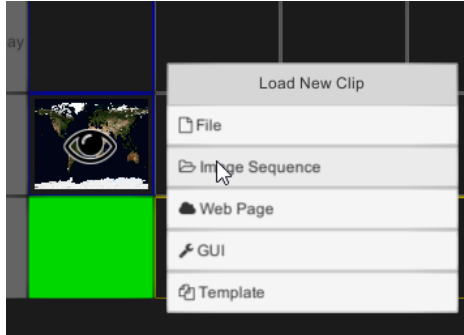


Incorporate into WorldViewer

Play Image Sequence

WorldViewer can immediately play an image sequence as a movie. HOWEVER, Google in all its wisdom decided to label their jpg files with the *.jpeg. That letter “e” is a deal killer. Here is the work around. Open a cmd prompt window. Navigate to the image sequence folder you are using. Enter the following command: **ren *.jpeg *.jpg** All your files are now properly named and ready for WorldViewer.

In the Space layer of WorldComposer select load new clip and choose Image Sequence. Navigate to your content folder and select the first frame. Typically this will be a Star Map (or Pano) content type. You can then set the playback speed etc in clip properties.



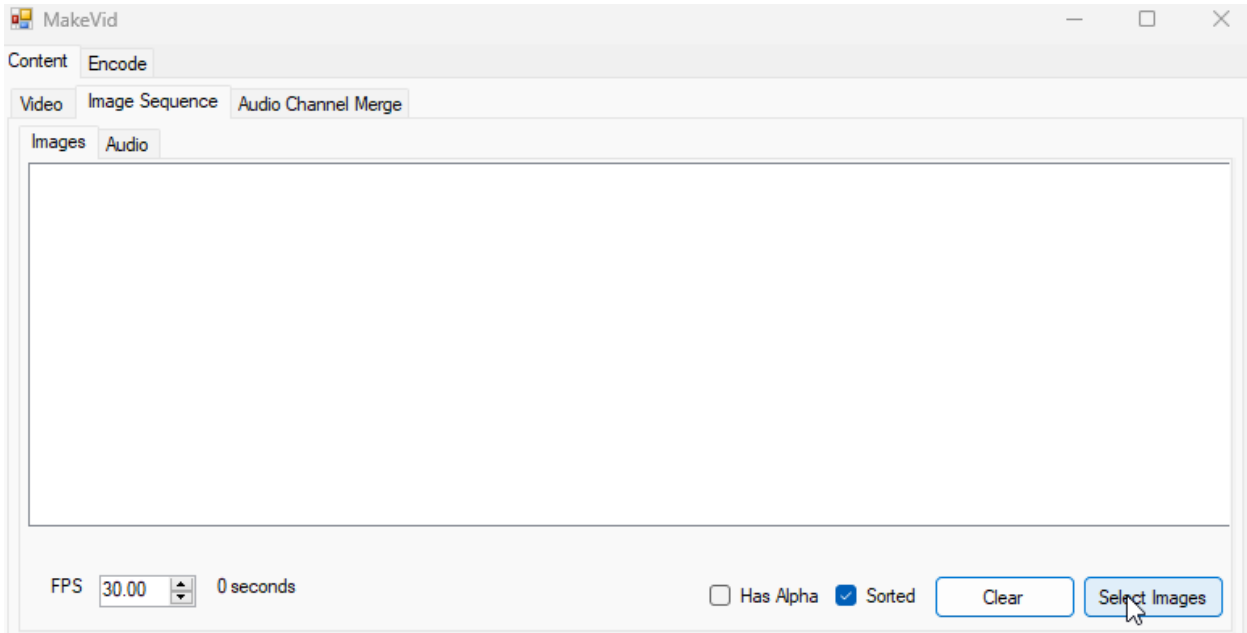
Create an MP4

One of the drawbacks of image sequences is the amount of storage they consume. It's much more efficient to create an mp4 movie from the files especially if you plan to share the content. WorldView includes makevid program that creates an mp4 movie from an image sequence. MakeVid is located here:

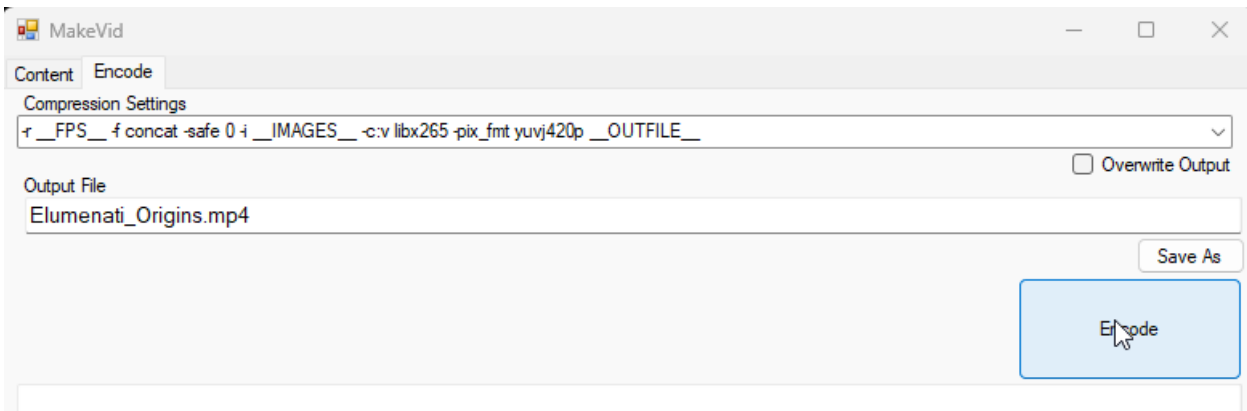
C:\Elumenati\WorldViewer2\WorldViewer_Data\StreamingAssets\tools\MakeVid

Why the Dev Team decided to bury it in a completely obscure location is a mystery that may never be resolved.

Run MakeVid and select the Image Sequence tab. Clear any files listed. Then *Select Images* and find the image sequence folder. Select All frames and hit enter. They should now appear in the list.



Next select the Encode tab and use the default compression settings. Name your output file and select Encode.



The video can now be incorporated into WorldViewer like any other 360° video. As a reference the Elumenati Origins image sequence is 3.46 Gb. The mp4 movie of the same resolution is 96 Mb. Quite a difference!!!

Use Scripting to Add Audio etc..

If you've loaded the Elumenati Origins bundle you will see a long script in the main chapter. This is my brute force method for pausing the certain locations and adding audio. You see clips being Played Paused and Stop after various Wait times. It takes a very long time to get these set correctly. Those of you used to using Adobe Premiere should definitely use that route!