

How to Capture Earth

The following are the steps and tips I used to capture Google Earth 4 for editing into Premiere Elements

What I used


- Google Earth 4
- Techsmith SnagIt (video capture utility)
- Adobe Premiere Elements 2

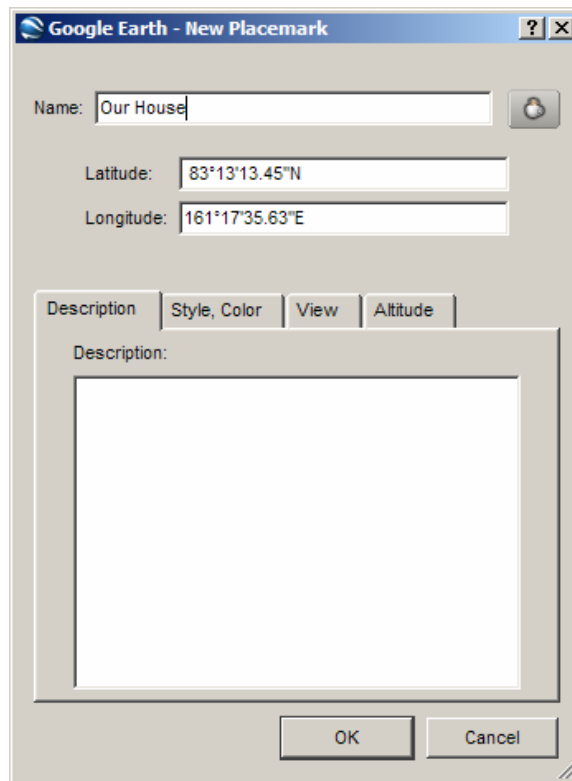
Before Capturing

First, it's important to set some configuration options. I found GE has many options and it's very flexible, so play around (I'll list some of the configuration changes that I made below). Second, select the layers that you will want displayed, or not displayed, during your capture. I like to display countries, major city names and international borders. It's also a good idea to create a folder and a .kmz file of all the locations.

Steps

1. Open GE and make the following changes you don't have to but I found these worked well for me:
 - a. Unmaximize GE
 - b. Select your TV standard of choice in the menu for View → View Size → TV Playback. This sets the pixel width and height of the viewing area to the ideal viewing size so you won't have to worry about scaling once you bring it into your NLE. (Assuming you capture at the same ratio of pixels)
 - c. Go to Tool → Options... Under the View tab there is a option box for Detail Area, set this to large. This will ensure that all pixels you capture will be at the highest resolution possible. At the medium and small levels there is an increase in performance, but GE shows a lower resolution around the outside edges to get that boost in performance.
 - d. I also bumped up the Terrain Quality to the max, but again there is a trade off in performance.
 - e. If you are visiting a lot of locations for your capture you may want to bump up your Memory cache size. This can be found under Tool → Options ... Click on the Cache tab Bump it up as high as you want Google Earth will set the max to whatever is appropriate for your system.
 - f. Finally, there are some settings for Control and Navigation. I left mine at the defaults, but you may wish to play with these to get your speeds and movements just right. I prefer to move slowly and then speed motion up once the capture is in Premier Elements.

2. Layers are the best part about GE. They allow you to identify Countries, Roads, Borders, Parks, cities, towns... and it's all at your fingertips with a click of the mouse. (Can you tell I've become a bit of a fan?) Pick what works for you, but note the more detail you add the more degradation in performance you will see, which can cause a not so great capture. (However, it's great for just browsing!)
3. The first step in setting your placemarks is to decide where you want to start. Mark Michalowski, of the Adobe User to User forums, offers a tip, where you capture in the opposite direction of what you actually want, then use Premier Elements to reverse the clip or clips in your end product. This is especially useful if you're zooming into more and more detail. GE will not stutter as it tries to load more data. If you are zooming out from a specific location to earth you will see less stuttering. So, my first placemark is of our house from 1000 ft above the Earth. To create a placemark click this icon  or go to Add → Placemark. The dialog box to the right will appear. You can do several things in this dialog, such as, provide a name and an icon for your placemark, or set the opacity, style and colour, etc. In my project, I wanted the placemarks hidden from view so I lowered the opacity. I wanted the flexibility to edit my own in the NLE using titles. Next, set your other placemarks and note you can use the tilt and rotate functions to put more action into your "Tour". Finally, make sure to save all your placemarks to a folder in "My Places". (I also save as kmz or kml as a backup, In case I ever had reinstall Google earth I'm guaranteed to have a permanent copy of my saved Tour.




Ok, so with all that done and once you've practiced your tour a few times, it's time to attempt a capture.


Capturing

As mentioned above my tool of choice is SnagIt, hopefully the capture utility that you are using has some of the same features. I spent quite a bit of time finding just the right setting to get the highest quality resolution with the smoothest playback.

Settings

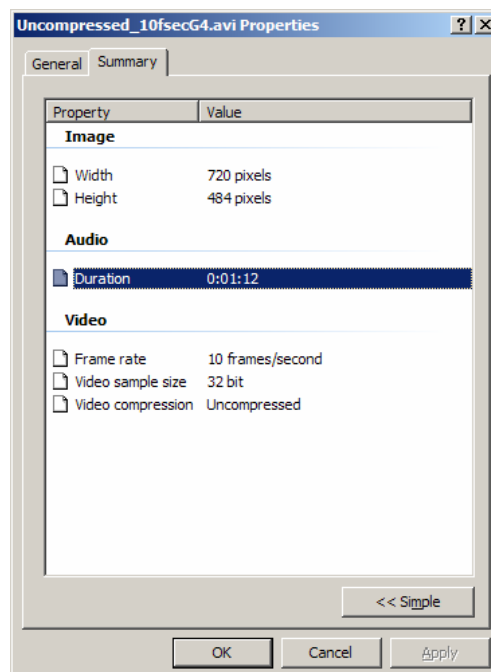
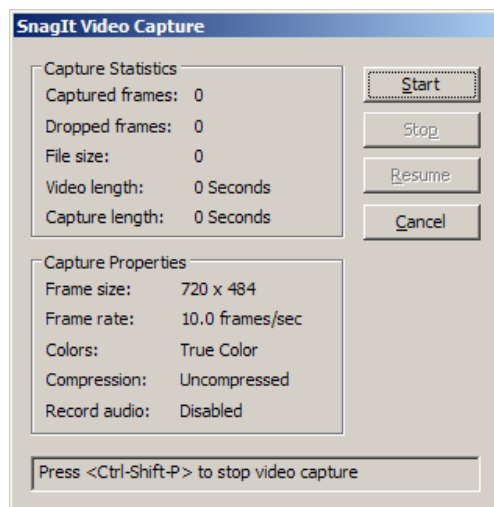
Mode: Select Video

Input: Select Fixed Region- I bet you can guess what the dimensions in pixels will be...that's right the same that you set earlier when you set GE for TV Playback! (NTSC or PAL) You set the dimension by clicking the  beside the Input selection dropdown.

Output: Select File – Again click on the  button (this time beside File) you will be presented with the option of selecting the Frame rate and the compression. I chose Uncompressed and only 10 frames per second. I found that the more frames per second you tried to cram into your capture the more my computer seemed to jerk and stutter to try and keep up. After many file captures this combination worked out the best. I also experimented with compressors to bring file sizes down. The Microsoft Video 1 compressor did an ok job but the difference in quality was noticeable. There was also a noticeable difference in file sizes. The Microsoft Video 1 compressor output a file of about around 200 MB. A similar capture using no compression came out to just less than 1G.

Filters: None

Options: Don't include Cursor



Editing

After all that.... we get to work with Premiere Elements! My recommendation is to import the file you captured. It will be a non-DV.avi file, and it will want to be rendered for smooth playback. My suggestion is that before you do anything... convert your capture to DV.AVI by choosing File → Export → Movie. Add the rendered movie to your timeline and do your edits to this clip. You will be able to cut, copy paste, time stretch, add video affects, overlay titles and many other cool things.

Final Note: You'll notice that there are some watermarks that are on your capture. (The Google logo and image credits) They're ways to deal with these.

1. You can cut them out of your capture, by resizing the height of GE display to slightly larger than the default 486. However, when you capture the width for the fixed region should remain 486.
2. I've used a lower third to cover mine up and I think it looks OK others may think it's too distracting, but it's simple and quick.

Well that's what I did there's other methods, but hopefully this can serve as a guide.