

Caching Google Earth Imagery

from MEASURE Evaluation

Storing Google Earth imagery for later use on a computer without an Internet hookup

Did you know that it is possible to run Google Earth while disconnected from the Internet? A live Internet connection is required only to retrieve images from the Google Earth servers into the computer's memory. If the area of the globe you are interested in covers one small portion of the imagery dataset, you can store, or "cache" a limited amount of this imagery for future use. If you plan to take your laptop out into the field to a location with limited Internet hookup, you can take your imagery files with you and use them wherever you go. This document explains how.

First, in Google Earth, under **Tools>Options**, select the "Cache" tab and set the maximum memory cache size to around 500MB (unless your computer only has less than that, in which case you may need to make this smaller).

Then, find the current disk cache data. The files you are interested in are called *dbCache.dat* and *dbCache.dat.index*. **These files are created on your local hard drive each time Google Earth is started**, and they contain a "working memory" of the imagery most recently viewed. This normally helps with re-draw rates by making the imagery easily accessible for the computer's short-term use. **The cache files are constantly being re-written, but at any point in time contain the imagery most recently viewed.**

To find *dbCache.dat* and *dbCache.dat.index*, look in the directory that corresponds to your operating system as specified below:

- Windows XP:

C:\Documents and Settings\your_user_name\Local Settings\Application Data\Google\GoogleEarth

- Windows Vista:

C:\Users\your_user_name\AppData\Local\Google\GoogleEarth

- Windows 7:

C:\Users\ your_user_name \AppData\LocalLow\Google\GoogleEarth

If you want to save your existing cache files for later use, rename the *dbCache.dat* and *dbCache.dat.index* files something like *dbCache_backup.dat* and *dbCache_backup.dat.index*. **Note: You will have to change these file names back to their original ones to use them again.**

Open Google Earth with an Internet connection, find the area you are interested in, and zoom to the scale at which you would like to capture imagery. Pan around if necessary to view the imagery you would like. The imagery loaded onto the screen will automatically be written to the new cache files.

(see reverse)

After creating the new cache files, disconnect from the Internet. Google Earth will use the imagery you have cached. If you have not zoomed to an area while connected to the Internet, the imagery for that area will not be available in the cache and will not display with maximum resolution. If you quit Google Earth and restart the program while still disconnected from the Internet, you will see several alert messages. There is no need to be alarmed at these messages. Simply respond to them as necessary and continue working.

The new cache files can be copied to a thumb drive and ported to another computer. To achieve this, copy the new cache files to the Google Earth cache directory that corresponds to the computer's operating system.

If you wish to re-connect to the Internet and use your original cache files (which you named something like *dbCache_backup.dat* and *dbCache_backup.dat.index*), delete or rename the *dbCache.dat* and *dbCache.dat.index* files you used for offline access and save *dbCache_backup.dat* and *dbCache_backup.dat.index* with their original file names.



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