Google Earth and Google SketchUp: Exploring the Globe

In this issue, I will highlight two fascinating Google tools: Google Earth and Google SketchUp. Google Earth ("GE," http://earth.google.com, currently version 4.3) is, in essence, a geographic representation of Google's search results, along with an incredible amount of user-generated content. To use GE, download the program to your computer and run it from there.

One of Google's strengths has been its ability to create simple and powerful frameworks into which anyone can place data. Much of the content mentioned below has been created by someone other than Google; they've used Google's tools and their own data to create a "mashup," a customized site that highlights their content within Google's structure. A nice example of this

is the Western Australian Shipwrecks Database. In GE 4.2 or greater, click on "Add Content," then search for "shipwrecks" in the resulting search box. Then click on "Open in Google Earth" to see shipwreck sites along the Australian coast.

At http://bbs.keyhole.com you can search postings from people who have created data sets with GE. Examples include an overlay of the Battle of Midway and images of National Defense Reserve Fleet vessels.

You can also search GE directly. Under the "Find Businesses" tab, I typed "maritime museums" in the 'What' box, and "Europe" in the 'Where' box. GE displayed the location of maritime museums and related sites across the continent. Clicking on the link for the Merseyside Maritime Museum, for instance, returned links to sites where people have posted images of the museum and described it in their travels, along with a link to the museum's web site itself. When you go to London and zoom in toward Nelson's Column, GE returns photos people have added, a link to Wikipedia about the column, and much more. By modifying the "layers" that appear on the image, from the list on the left, you can remove all of the photographs, add links to galleries, DVD stores, and ATMs, and all sorts of other things. In the United States, Google has roving vans with cameras taking photos for their "Street Level" layer, so you can zoom in and see street-level images of many large cities.

A correspondent has described to me how he uses GE to view sites he's reading about. You can, for instance, search for

"Diamond Head, Hawaii," then zoom to the surface of the water and view the cliffs as they would appear if you were sailing by.

One of the most incredible mashups in GE is **David Rumsey's historical map collection**. Rumsey, a prolific map collector, started digitizing some of his thousands of maps about ten years ago. He currently has over 17,000 maps online at **http://www.**

davidrumsey.com and about 120 are also in GE. The ones in GE can be found by selecting the "Rumsey Historical Maps" layer under "Gallery," then looking—primarily in Europe—for the compass roses. Older maps, which don't exactly match the true topography, are stretched to fit, which makes for an interesting view. Of course, the original map is available for viewing at a very high resolution at Rumsey's site.

Another enhancement to this already-incredible tool is **Google Sketch-**

Up. SketchUp is a fairly simple Computer-Aided Design program for the masses and allows one to build 3D designs of all kinds of objects. While building a model is complex and requires downloading another program, you can still benefit from the work of others by looking through the **SketchUp Warehouse** at **http://sketchup.google.com/3dwarehouse/**. The designer "Gacek" has built a set of incredibly complex ship models in SketchUp. If you search for, say, "HMS Victory," you'll see remarkable 3D models of the ship. Then select "View in Google Earth," and GE will take you to Portsmouth. As you look around the docks there, you'll discover that many of the building images are models built by individuals and added to the GE database.

Google Earth and Google SketchUp are amazing examples of what can be done online when a company offers an immensely powerful and simple framework and everyone else contributes the content that interests them.

Suggestions for other sites worth mentioning are welcome at **shipindex@yahoo.com**. See **http://www.shipindex.org** for a compilation of over 100,000 ship names from indexes to dozens of books and journals.

——Peter McCracken



