## LBSC 690: Information Technology Homework 02: Networking and the Internet

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(Adapted from original assignment by Doug Oard.)

I have encountered an interesting Web page at http://www.flyonthewall.tv/casestudies.php?site=5, and would like to know more about the people or the organization that are responsible for the content on this site. There are at least five ways that we could search down this information; let's try each of them:

- 1. By following links from that Web page, see if you can find a page on the same site that makes a claim of organizational or individual responsibility for the content on the site.
- 2. Sometimes no appropriate links are provided. In such cases, URL trimming sometimes offers a way of finding a page on which a claim of responsibility is made. The idea is to remove parts of the URL starting at the right until you get to a page where such a claim is made. For example, the Web page for the Course Schedule for this course is http://www.umiacs.umd.edu/~wew/teaching/690/spring12/schedule.html URL trimming would eventually get you back to http://www.umiacs.umd.edu/~wew, where you would be redirected to my home page. Overtrimming to http://www.umiacs.umd.edu/would be less useful in this case, since the UMIACS server hosts unrelated information from many people.
- 3. Sometimes it is not possible to find anything that resembles a claim of responsibility, and sometimes that claim may be misleading (for example, if you found a Web page from the "Committee to Re-Elect the President," you might want to know something more about that organization). One way to do that is to look at the domain name registry to see where the domain name is registered. Sometimes you will find the full domain name registered, other time you may find that only a part of the name is registered. In this case, you want to trim the URL from the right until you get to the domain name, and then trim the domain name from the left ("www.umiacs.umd.edu" would become "umiacs.umd.edu" and then "umd.edu"). A useful site for looking up domain names and other data

is http://network-tools.com. The service to look up the owner of a domain name is often called whois.

- 4. Some top-level domain names are assigned to organizations (the U.S. government owns ".gov", for example) or to countries ([an industry self-regulatory body in] Australia owns ".au"). So in this case it would be useful to know who owns ".tv". If you do much of this, you will learn to recognize some of the more common top-level domain names. There are a lot of lists that provide this sort of information; one can be found (with some poking around) at http://www.iana.org/.
- 5. Ultimately, the packets that you send to a host have to know how to get there. You can follow that path using a "traceroute" service. One such service is "visual traceroute" at http://visualroute.visualware.com/, which provides quite a lot of detail on how packets get from near Dulles Airport in Virginia (if you select "from this server") to any site you specify. (If you are unable to install the visual traceroute software, try a text-based system such as http://www.tlshopper.com/tools/traceroute/result/, but note that they trace the route from the online server, not your computer.)

The homework assignment is to use all of these techniques to determine who is responsible for the content that you see on the site given above. Describe what you find using each of the five techniques in a one-page email to the instructor.

Claim of responsibility The top-level menu has two relevant links, "About us" and "Contact us". The "About us" link (http://www.flyonthewall.tv/aboutus.php) reports that FlyOnTheWall is a video production and media team established in 2001, but does not report information about the organization's owners or location. The "Contact us" page gives a general enquiries mail and phone address in Covent Garden, London, UK. An employment ad for a freelance technical producer states the location of employment as Buckinghamshire.

**URL trimming** The landing page reports a case study in London. Trimming the URL to http://www.flyonthewall.tv/casestudies.php reports clients in US and Europe. Trimming further to http://www.flyonthewall.tv/ describes the company as "one of Europe's leading broadcasting companies", and gives the same Covent Garden address as the head office.

WHOIS Running the UNIX command "whois www.flyonthewall.com" gave no match. Running "whois flyonthewall.com" returns a record, stating the owner and administrator is Patrick Asche, from Munich, Germany; while the technical and zone contact is Mareen Eisenmann from Forchheim, Germany. (Looking up the web address corresponding to the latter's email suggests that this is an employee of the hosting company; the former person appears to be an employee or partner in FlyOnTheWall itself.)

**TLD** The .tv domain extension is for the Pacific Island nation of Tuvalu. According to http://www.iana.org/domains/root/db/tv.html, the registrar is Verisign. The Wikipedia article, http://en.wikipedia.org/wiki/.tv, states that the extension is popular with media companies because it is short for "television"; thus, FlyOnTheWall doubtless has no connection to Tuvalu.

**traceroute** Executing the UNIX command traceroute www.flyonthewall.tv is not very informative: hostnames are only give as far as fral.he.net, which (I guess) stands for "France". The final destination IP is "95.130.255.50". Looking this IP address up in an online GeoLocate tool places it somewhere in Germany.