Hosts File for Shipboard Broadband
Originated by: Trevor Young (U. Hawaii) on September 14, 2011

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The satellite broadband connection onboard ships is a luxury that is supposed to be used for certain science and support purposes, but I think we all know that it also gets used for general browsing by ship's crew and science party members which can result in a really slow or unusable connection at times. Without locking down the network, every byte that can be prevented from going over the satellite link helps. During general browsing, lots of traffic can be generated by unwanted connections to ad servers or other unsavory machines, and if this could be prevented it might help to speed the connection up somewhat. Every little bit (byte) helps.

Does anyone have experience using a hosts file on a ship's main routing machine to filter out some of this completely unwanted traffic? I've been using a hosts file from http://someonewhocares.org/hosts on my personal machines for several years now to reroute some of this unwanted traffic to localhost. It is a regularly updated list of malware, advertising, and general phone home type addresses, which all get routed to 127.0.0.1. I haven't performed any scientific traffic analysis or speed tests to see what the difference was, but sometimes the absence of popups and ads on websites was quite noticeable. Anyone with experience in this regard?

Mahalo

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Reply from Dave Cohoe (USCG) on Thu, 22 Sep 2011

Trevor,

I use a hosts file from MVPS to make systems safer. It sounds similar to yours, blocking adservers & known malware hosts. http://winhelp2002.mvps.org/hosts.htm

I haven't used it on routers, and I have had problems connecting to streaming video servers run by some TV stations. They appear to require a connection to specific adservers before allowing the video to load.

Regards,
Dave

Reply from: Geoff Davis (UCSD) on Fri, 23 Sep 2011

Hi Trevor,

You might want to take a look at the Hiseasnet wiki at http://hiseasnet.ucsd.edu/wiki
There are a couple of sections there about managing your bandwith.

In terms of a "hosts file on a ship's main routing machine", you might consider setting up a web proxy server with a local cache aboard the ship.

For example, here's a writeup about what SIO is doing aboard the Melville and Revelle:
https://hiseasnet.ucsd.edu/wiki/display/hsnops/Squid+proxy+settings

Additionally, some work was done by the Hiseasnet staff to set up a shore side proxy server with all of the Blacklisting done for you. See https://hiseasnet.ucsd.edu/wiki/display/hsnops/Parent+blacklist+proxy for information about that.