

Net Ninny – Results of testing

Anton Sköld & Gustaf Bodemar

(antsk320 & gusbo010)

TDTS04 – Linköpings Universitet

The proxy has been tested on both Windows and Linux machines, with the browsers Chrome, Firefox, and Internet Explorer. Firefox was tested with both the OS proxy settings, and the build in browser proxy settings, both have the same results.

The websites we tested were the ones recommended on the assignment page, these are:

- Good text file (<http://www.ida.liu.se/~TDTS04/labs/2011/ass2/goodtest1.txt>)
- Good HTML file (<http://www.ida.liu.se/~TDTS04/labs/2011/ass2/goodtest2.html>)
- Bad URL (<http://www.ida.liu.se/~TDTS04/labs/2011/ass2/SpongeBob.html>)
- Bad content (<http://www.ida.liu.se/~TDTS04/labs/2011/ass2/badtest1.html>)
- <https://stackoverflow.com/>, <https://www.aftonbladet.se/>, <https://www.svd.se/>, <https://liu.se/>, <https://qz.com/>, <http://www.bbc.com/>, <https://www.youtube.com/>, <https://www.wikipedia.org/>
- <http://httpbin.org/> and most subpages of it.

The behavior of the proxy is fairly consistent across all of the above browsers and websites, with a few exceptions.

The site works well on most pages, but it has issues with pages that use chunked-encoding. We have (through a tip from our lab assistant) assumed that all pages that are returned have Content-Length included in the response header. The pages that use chunked encoding do not have such a thing, and then the proxy fails (without a crash). The TDTS04 course homepage does not work, because it uses chunked encoding. The trace file is coursehomepage.pcapng, where packet #9 is the GET-request, and packet 236 is the HTTP response, lacking a Content-Length header.

<http://httpbin.org/> was the most useful site for testing purposes. The subpages contain many different techniques and returned data types, which were all tested on our proxy. As far as we could see, every single subpage worked. The POST-request subpage (<http://httpbin.org/forms/post>) did not work properly though. This is because we haven't supported the request type in our proxy. The proxy does not crash with POST-requests, but no POST-data is transmitted to the webserver.

When testing, this proxy can only handle one connection at a time. We have put a timeout of 3 seconds on the sockets to prevent one bad resource hogging up the entire proxy. One interesting thing to note about resource hogging, is that: When browsing the web without an adblocker, there are very many ads and/or certifications constantly spamming the

connection with unsupported requests. This makes it slow to get your actual web-request through sometimes. It is very recommended to use some form of AdBlocker (we used uBlock Origin in Chrome) while browsing, as it speeds the proxy up significantly.