Comp 8505 Computer Systems Technology November 2016

Data Communication Applications

Assignment #4

Due: To be completed by November 14, 1700 hrs. You may work in groups of two.

Objective: To design a basic DNS spoofing application using any language of your choice.

Your Mission:

You have been provided with a detailed module on the DNS protocol, together with basic design and framework for basic DNS traffic manipulation.

For this assignment you are required to implement a DNS spoofing application. This is primarily a POC application. All that is required as acceptable functionality is web site spoofing.

Constraints:

- Your application will simply sense an HTML DNS Query and respond with a crafted Response answer, which will direct the target system to a your own web site.
- You will test this POC on a LAN <u>on your own systems only</u>. This means that you are not to carry out any DNS spoofing activity on unsuspecting client systems.
- You are required to handle any arbitrary domain name string and craft a spoofed Response.

To Be Submitted Electronically:

- Submit a zip file containing all the code and documents as described below in the sharein folder for this course under "Assignment #4".
- Submit a complete, zipped package that includes your report, tools that you used, and any supporting data (dumps, etc), and references. Test results, complete with supporting data such as screen shots and traffic dumps
- Hand in complete and well-documented design work and documents in PDF format.
- Also provide all your code **listings** and an **executable**.
- You are required to demo this assignment in the lab.

Assignment #4 Evaluation:

Design:	5 / 5
Documentation (explanation, user guide, etc):	5 / 5
Testing and Supporting Data:	10 / 10
Functionality:	30 / 30
Total:	50 / 50