Comp 8505 Computer Systems Technology October 2016

Data Communication Applications

Assignment #3

Due: October 24, 1700 hrs. You may work in groups of two.

Objective: To become familiar with packet-sniffing backdoors and to implement Linux backdoor using the **libpcap** library.

Your Mission:

You have been provided with a basic design and the components for a packet sniffing backdoor. You have also been provided with several packet capture examples using **libpcap**.

You are required to now put all the pieces together and implement a complete and working Linux backdoor.

Constraints:

- Your backdoor must camouflage itself so as to deceive anyone looking at the process table.
- Your application must ensure that it only receives (authenticate) those packets that are meant for the backdoor itself.
- The backdoor must interpret commands sent to it and execute them and send the results back.
- Incorporate an encryption scheme of your choice into the backdoor.
- You are required to demo this assignment in the lab.

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 #3**".
- Submit a complete, zipped package that includes your report, tools that you used, and any supporting data (dumps, etc), and references.
- Hand in complete and well-documented design work and documents in PDF format.
- Also provide all your code **listings** and an **executable.**

Assignment #3 Evaluation:

Design:	20 / 20
Documentation (explanation, user guide, etc):	5 / 5
Testing and Supporting Data:	25 / 25
Functionality:	50 / 50
Total:	100 / 100