ISEC2025 Vulnerabilities and Exploits

In Class Assignment 1 Part 1 – DNS Zone Transfer

Issued: January 18, 2024 Due: February 2, 2024

Preamble

This assignment will consist of two parts which, when taken together will form 25% of your final mark for the course. If the DNS name Server is not properly secured, attackers can use it to discover information about your network by transferring all the Zone records to the attacker's local cache.

For Part 1 of this assignment, you will use the nslookup command in Windows to execute a zone transfer against the name server used by "zonetransfer.me" referenced in our previous in class activity.

Requirements

Complete the following tasks:

Step 1: Review the syntax of nslookup until you understand how to issue the command corresponding to a Zone transfer.

Step 2: Use the command to determine the name server(s) being used by zonetransfer.me.

Step 3: Use the command structure to make the name server being used by zonetransfer.me to be your name server.

Step 4: Execute a zone transfer against the name server with the nslookup command.

Note: We demonstrated the method for use with the dig command in class. The nslookup command will require research on your part. Also, note that there are on-line references and examples of using zonetransfer.me to demonstrate a zone transfer.

Place the commands that you used (including any parameters) and their output generated into a Word file for submission.

Submission Guidelines

Your assignment submission is to be uploaded to a Brightspace drop box on or before the due date.

The body of your document, not including the title page will consist of a separate title page and pages containing your commands and output.

You will create a document in MS Word for the content of your submission. You may also convert your document to PDF if you wish.

The document is to be of professional quality including content, layout, font, grammar, spelling, overall appearance and structure. Point form answers will not be considered professional quality.

Document name (i.e. filename) **MUST** be of the format: **YourLastName-YourFirstName-ISEC2025-As1**

Your document must include a separate title page containing the **course code** (ISEC) and **number** (2025), your name, the assignment number (1) and the assignment title ("DNS Zone Transfer"). All questions and answers should be clearly labelled, and answers clearly written.

Rubric

Together, both Part 1 and Part 2 (released later) of this assignment are worth 25 points towards your final mark with the following distribution:

Part 1: 10 points

Part 2: 15 points

and Part 1 is scored out of 30 points using the following rubric.

Please note that a pass is 60% (18 points) and if all categories are "Condition Somewhat Met" then you can only score a maximum of 15 points and will therefore not receive a passing grade.

Neatness counts!

Total marks:30

Rubric	Condition	Condition	Condition Met
	Not Met	Somewhat Met	
Document Names and Title Page and Sections	0	2	4
are clear and well formatted as required.			
Each question and task is complete and correct	0	13	26
Total Points available by column	0	15	30