CS471
Security & Info Assurance

Welcome!
3/1/2023

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Course Schedule

Week #	Monday	Wednesday	Reading	Weekly Topic	Due	Assigned
1	01/16/23	01/18/23		Getting started		
2	01/23/23	01/25/23	Chapter 1	Introduction		Assignment 1
3	01/30/23	02/01/23	Chapter 2	Symmetric Encryption	Assignment 1	Assignment 2
4	02/06/23	02/08/23	Chapter 3	Asymmetric Encryption	Assignment 2	Assignment 3
5	02/13/23	02/15/23	Chapter 4	Key Distribution and Authentication	Assignment 3	
6	02/20/23	02/22/23	Chapters 1-4	Review : **Midterm 1**		
7	02/27/23	03/01/23	Chapter 5	Network Access Control		Assignment 4
8	03/06/23	03/08/23	Chapter 6	Transport Level Security	Assignment 4	Assignment 5
9	03/13/23	03/15/23	Chapter 7	Wireless Network Security		
10	03/20/23	03/22/23	Chapter 8	DNS and Email Security	Assignment 5	
11	03/27/23	03/29/23		Spring Break		
12	04/03/23	04/05/23	Chapters 1-8	Review : **Midterm 2**		
13	04/10/23	04/12/23	Chapter 9	IP Security		Assignment 6
14	04/17/23	04/19/23	Chapter 10	Malicious Software	Assignment 6	Assignment 7
15	04/24/23	04/26/23	Chapter 11	IDS		
16	05/01/23	05/03/23	Chapter 12	Firewalls	Assignment 7	
17	05/08/23	05/10/23		Finals Week		
	*No Meeting			Final Exam: **TBD**		

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The X.800 service categories will be important for the entire semester.

As we examine security, this will be our measure.

- **X.800 Service Categories**
    - Authentication
    - Access control
    - Data confidentiality
    - Data integrity
    - Non-repudiation

X.800 SERVICE CATEGORIES

- Authentication
- Access control
- Data confidentiality
- Data integrity
- Nonrepudiation

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Today

– OpenStego
– Assignment 4

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OpenStego

Free and open source steganography.

– OpenStego is written in Java.
– Runs on all platforms.
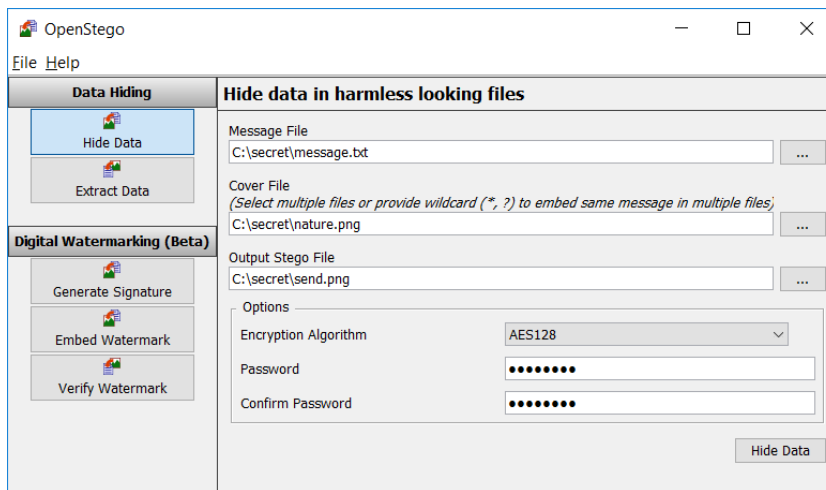– It supports AES 128 and AES 256.

Project website:
https://www.openstego.com/index.html

Project GitHub:
https://github.com/syvaidya/openstego

Download current release:
https://github.com/syvaidya/openstego/releases
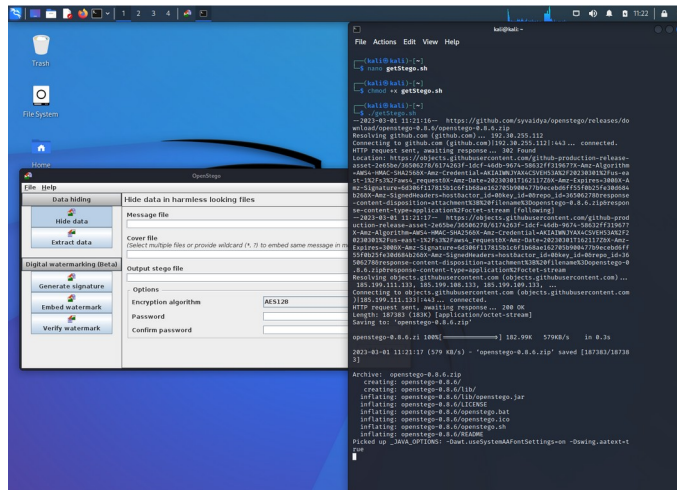
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Getting OpenStego

Create a shell script, `getStego.sh`, to download and run openstego:

```
#!/bin/sh
mkdir ./Desktop/openstego
cd ./Desktop/openstego
wget https://github.com/syvaidya/openstego/releases/download/openstego-0.8.6/openstego-0.8.6.zip
unzip openstego-0.8.6
java -jar ./openstego-0.8.6/lib/openstego.jar
```

Run the script:
```
chmod +x getStego.sh
./getStego.sh
```
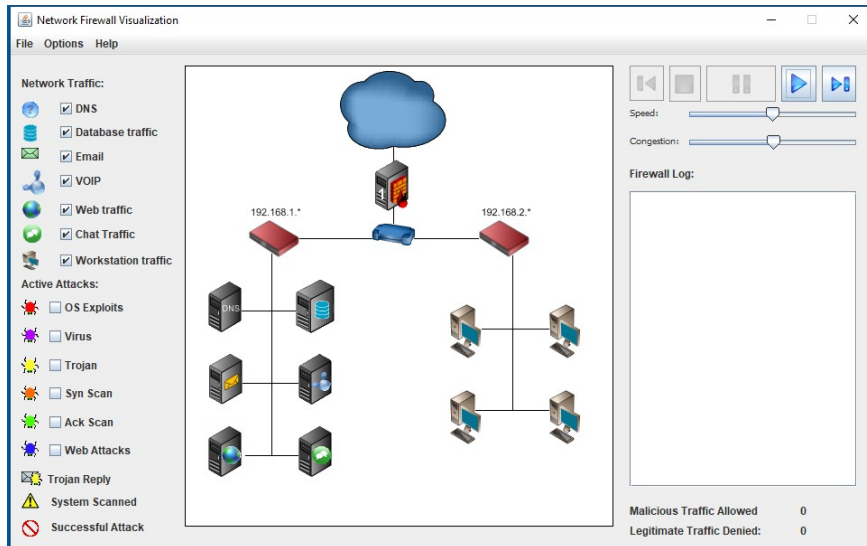
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Assignment 4

Use the IPTables firewall to create, block, and redirect network traffic.
Demonstrate the limitations of mac address filtering.

Analyze and discuss the results.

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Thank you!