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Playbook Entry 2

1/26/25

1. **Title:** Playbook Entry 2 Cryptography
2. **Summary of Key Concepts:**

Stenography: transposition and substitution. Encryption and decryption. Various algorithms are used; hash, symmetric and asymmetric algorithms to name a few.

1. **Key takeaways:**

-Cryptographic algorithms are public knowledge the key to decrypt it must be kept secret

-Cryptography is essential to maintaining confidentiality, integrity and availability of information data.

-Blow fish algorithm is the strongest algorithm. There have been no weaknesses discovered with it.

**4. Tools and techniques used:**

-Virtual machines

-Block cipher

-Hash algorithms

-Asymetrix algorithms

**5. Lab Summary:**

-The objective: using Open Puff stenography to hide a message

-Steps performed: Decompressed Open Puff. Use windows snipping to take a screen shot with Open Puff in the background. Use notepad to create the secret message. Turn it into a zip file. In Open Puff you are given three passwords to use. Type them into Section A, B, and C. In Section 2 you will add the zip file you created. In Section 3 you will add the screenshot you took and Europe\_1380px.jpg. Close the Open Puff data hiding screen. Click unhide. Type in the three passwords. Click add carriers and find the folder containing the two screenshots. Add both. Click unhide. Go to the folder where the hidden file was made. Extract it.

-Results: We encrypted a message

-Reflection: Encryption works to share sensitive information.

**6. Real world application:**

**I** work in an office. I need to send a coworker important information, but they live across the country. I will use asymmetric software to copy the data. I will use my coworkers’ publicly known key encryption. She will use her private key to decrypt the email. Because I used asymmetric encryption, I can be sure the information stays confidential.