Project Check-in 1

04/03/2023

Item 14: Any sensitive project documentation that is no longer useful is stored securely or disposed of.

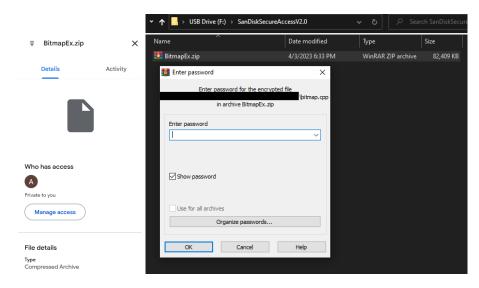
Link:

https://github.com/Masiddiqui0300/CEN3078SecProject/commit/839a23bfd2bc51f1f130f4c20ebe81a4 3f6c49b0

Explanation: Folder containing all old project debug logs was deleted from the repository. Some logs contained potentially sensitive information like system admin and user account names. None of these logs were considered useful so they were not stored.

Item 5: Backup Policy is in place and being used.

Proof:



Explanation: The project previously had no backups and was at risk of a total loss of data had anything occurred to the original repository. The project now has two additional storage locations as backups.

The first backup uses AES encryption protected by a passphrase and is contained on a separate secure device.

The second backup is hosted online inside a personal google drive account protected by 2FA. As an added layer of security, the project files also use AES encryption protected by a passphrase.

Next 4 items to be attempted:

Item 8: Accounting is integrated into the code itself (for exceptions, errors, and user input failures at minimum).

Priority & Difficulty: Mid, Moderate

TODO: Add logging to the code that will output any erroneous outcomes during runtime.

(new) Item 15: Sanitize filename string inputs from user to prevent code injection.

Priority & Difficulty: Mid, Moderate

TODO: Use zero trust methods to sanitize inputs when the code asks for the inFileName and encryptedFileName.

(new) Item 16: Handle menu choice char inputs to protect against type conversion code injection.

Priority & Difficulty: Mid, Easy

TODO: Project code contains section where user is asked for a single char input to choose between encryption and decryption. Whitelist the possible inputs to prevent possible code injection or alternatively replace with a switch statement or if/elif/else statement.

(new) Item 17: Protect against possible buffer overflow from use of raw pointers.

Priority & Difficulty: Mid, Moderate

TODO: Replace raw pointer instances in the code with smart pointer equivalents.