

BACKUP AND RECOVERY

Most software systems, especially a password manager, must have files outside the systems in which they store application data outside working memory, which stores the systems while they run. However, when the user shuts down the systems, memory returns the allocated space for the systems back to the operating system. So, there must be files kept in storage to maintain the data needed to run the system again in the future. Nyan Security's Password Manager will implement a simple, yet robust solution.

On the system's first start-up on a machine, NSPM will prompt the user for a master account username and password. The system will then generate an ASCII text file, with a filename matching the original account username and with the file extension “.nyn.” NSPM will store this file in the same OS directory as its executable. Whenever the user enters any online account information into the system while it is running, the system will encrypt the data and write it to this text file. Upon all subsequent initializations of NSPM, it will prompt the user for his/her account data, it will open the appropriate file in an input stream, and it will load all the user data into memory. Once the user data is loaded in an object-oriented fashion, the system will be able to decrypt and search the data. The user may then initialize any of the use-cases listed elsewhere in this document.