PASSWORDS:

Passwords are the bane of every Internet users existence and a major factor in not being able to access a wide variety of network based services. As an ever-increasing number of services become Internet based, it becomes extremely important, from both a security perspective as well as a liability issue, for providers to verify that the person trying to access an account is the only person authorized to do so.

To handle this growing onslaught of passwords, most people have created some type of list (some are done electronically, but most on paper) of the website, the login ID, and the password for all of their respective online accounts. Although simple and easy to use, there are three (3) major problems with this approach;
1. ID/password pairs are most likely saved in an unsecured plain text mode.
2. Continually evolving password changes are not always updated in to the list.
3. Any password change MUST be updated on every Internet user device, else out of sync devices tend to force new password creation

Password Management Applications:

Password Management Applications provide a secured, encrypted storage "vault" for passwords and various other personal information to be used for online access to website with security controls. The Apple iCloud Keychain is a free password management application that can synchronize personal information, account names, passwords, and credit card numbers across all your Apple devices.

There are numerous password management applications available for Windows and/or Apple. Some of these password management applications have free versions, but most are for fee:
- LastPass
- Dashlane
- KeePass
- 1Password
- RoboForm
- Sticky Password
- Password Boss
- LogMeOnce
- Keeper Password Manager
- AgileBits
- True Key
- Zoho Vault
- mSecure

Password Dual Authentication:

Dual Authentication is fast becoming the defacto login authentication process as it requires the initial User IP and Password for the first step, then requires a code sent to a verified user device (i.e. smartphone) to be entered and the second step. It may be bothersome, but it is a working real time check that proves you are who you say you are!