

Investigator Tips



Five Tips for Strong Passwords

Passwords are not passé as some would have you think. They are still vital to device and account security. And, they are effective when they are created to meet certain criteria.

Here, we review five tips from the United States Computer Emergency Readiness Team (US-CERT):

- Don't use passwords that are based on personal information that can be easily accessed or guessed. For example, if your birthday is October 19, 1980, then don't use 10191980 as a password or even as part of a password.
- Don't use words that can be found in a dictionary of any language. Hackers use a "brute force attack" in which they can run a dictionary's worth of words up against encrypted data in a password field to try to determine the password.
- Use a mnemonic (a verse or formula to aid in recall) to remember complex passwords. For example, "I like to play basketball" could help recall the password, "I1Tpbb" (using a "1" instead of an "L" for added complexity).
- Use a combination of letters (uppercase and lowercase), numbers, and special characters.

Follow the parameters of the software or device for which you are creating the password but if you can, create a longer rather than shorter password with a variety of character types.

- Consider using passphrases. A passphrase is a series of words and makes for an easy-to-remember and long password. Don't spell all of the words correctly which would make the password more vulnerable to a brute force attack. An example provided by US-CERT is "This passwd is 4 my email!" which would be a strong password because it has many characters—uppercase and lowercase letters, numbers, special characters, and spaces.

Important Note: Internet-connected devices (home gaming system, Wi-Fi router, home security system, for example) are assigned default passwords by the manufacturer. These look to be complex collections of characters that would not be easily guessed. But, they may be discoverable through internet research. Change the default password on any device during setup in your home.

Always remember that passwords are more effective when they've been built through a purposeful and creative thought process.