

## Passwords



I cannot emphasize enough how important it is for you to pick strong passwords. If someone figures out your password, then they can now do all the private things that you do. This might include reading your email, sending email in your name, accessing your bank accounts, making purchases, logging into your computer, etc.

How long does it take for a password cracker to guess your password? A general-purpose computer can be set up to guess over a hundred million passwords per second. Adding special hardware and multiple computers working in unison can increase this to billions or even trillions of guesses a second.! The Oxford English dictionary has about 220,000 words. This means that if your password is a common English word, it wouldn't even take a second to guess it! Before trying a brute force attack, professional password crackers will first try the words in every dictionary, common passwords, common substitutions, date combinations, etc. Believe me, they know all the common approaches people use to create passwords.

So, how do you create and keep a strong password? Follow these guidelines:

- 1) Use a different password with each account.
- 2) Use a long password. The longer your password, the harder it is to guess.
- 3) Use a password with a mix of letters (upper and lower case), numbers, and symbols, but avoid obvious substitutions (such as a 1 for an "a" or a 3 for an "e" or a 0 for an "o")
- 4) Never use a real word, in any language, even if you spell it backwards.
- 5) Do not use personal information such as your name, phone number, parts of your address, friends names, birthdate, etc
- 6) Change your passwords regularly

Many of my customers struggle with passwords because they are hard to remember. Here is an approach to creating and remembering a strong password.

First of all, create a mnemonic that only you know. For instance, you might decide your standard phrase is "My computer guy Steve sends me email once a month". Then, picking the first letter of each word and mixing case and numbers, you would have "McgSsme1am". Further, add one or two special characters, making it "Mcg(Ssme1am&". This can become your standard prefix. Then, to make it unique for each website, you could add the first and last letter for each website to the end. So, if you were creating a new password for Google, Google starts with a "G" and ends with an "e", so your new password for Google would be "Mcg(Ssme1am&Ge".

If this doesn't work for you, there are also random password generators such as 1password which can be found at <https://agilebits.com/onepassword>. With products such as these, you only have to remember one password.

Finally, if you think you have a strong password, you can safely test it here: <https://www.microsoft.com/security/pc-security/password-checker.aspx>

*As always, I hope you have found this information useful. If you do not wish to receive these emails in the future, let me know.*

*This newsletter, as well as all past newsletters, can be found on my web site (<http://steve.gimnicher.com>).*