

Security and Passwords

Do you think your passwords are pretty good? I thought mine were, until I tried a few on a password testing site. Some had gotten “Good” or “Excellent” ratings when I created them a while back, but now they turn out to be junk. Furthermore, I was puzzled by why a password rated as “Good” or “Excellent” on one site rated as “Poor” or “Weak” on another.

The answer is that crooks have gotten their hands on some ultra-sophisticated password cracking software and hardware that can complete millions of crack attempts in literally a second or two. These programs are ever more sophisticated, because we collectively are giving the crackers all the clues they need to crack our passwords! **Wait... What...? Here’s how it works:** the programs pull in data from everywhere on the internet, starting with dictionaries. They then move on to pulling movie scripts, song lyrics, and other published material. Finally, the programs surf to social network sites like Facebook, Pinterest, Twitter, etc. and start “scraping” data from there as well. Everything, including slang, is pulled in to a giant database, and then used to try and match your password.

For example: let’s say your password is “Chuckie58Snoopy!” Most password rating sites would give that a “good” or “excellent” score, because it contains the standard recommendations for passwords: it’s long, has Upper/Lower Case letters and a symbol. But it’s not good when you consider that your Facebook page has your dog’s name (Chuckie), it knows you were born in 1958, and that your favorite cartoon character is Snoopy. The crackers know the usual patterns people use, and then use it against us. That password does not stand a chance anymore against a dedicated password cracking server.

Side Note: Password cracking servers, despite being used for nefarious purposes, are awesome pieces of machinery and software sophistication. Sophos.com has a nice video demonstration: [Watch Video Here](#) But... ignore the middle portion of the video about using four words as your password, that no longer works, here’s why: <http://www.netmux.com/blog/cracking-12-character-above-passwords>

So what do you do? If you want to “roll your own” use a phrase in some type of pattern plus symbols or numbers. For example, let’s say you like the movies “Gone With The Wind” and “Chariots Of Fire”. You could take the first two letters of each word, tack on a number or symbol at the start, middle and end. The result is a pretty good password: **@GoWiThWi&ChOfFi%**

That got a **10-Century-to-crack** rating on Kaspersky’s Password Strength website, which, unlike other password rating sites, takes into account the dictionary attack process described above. If you want to try some ideas yourself, here is the link to Kaspersky’s site: <https://password.kaspersky.com/> When you use the site, note that the initial result is a rating based on a regular PC: to see how it stands up against a supercomputer, scroll halfway down the page. If you want to offload password creation, try a password manager like Dashlane, LastPass, or LogMeOnce. Here is a link to PC Magazine’s 2017 Ratings: [Password Manager Review](#)

-John Becker