

## Hello Help Desk, I Can't Remember My Password

The very first use of a password (or passphrase) for many of us was to gain access to and as importantly keep the enemy out of our childhood club house. Back in adolescents it was an easy enough task to accomplish since the enemy was typically marked from birth as them (usually gender based). Still we resorted to complex access methods including regularly changing passphrases, hand signals and even resorted to our play attire as way to further ensure the exclusivity of our house of us. Them not welcome!

It would appear that with age we have forgotten some basic lessons that served us well as children. Protecting access to our online stuff today is fundamentally no different and begins by determining which of the three authentication factors to use. That is something you know (password or passphrase), something you have (play attire) and something you are (us vs. them) or any combination of the three (also known as multi factor authentication).

It may be the most common authentication factor in use today, but generally speaking "something you know" tends to be the weakest of the three authentication factors in that it requires the most work by its owner (that would be us). However, with a little effort and awareness strong and proper password usage can be achieved. Let's begin with some fundamentals and simplify till we reach the right amount of balance between online security and ease of use.

Fundamentals of Strong & Proper Password Usage:

- Strong passwords typically contain at least one number, one alpha character, and at least one upper case alpha character;
- minimum of eight (8) characters in length (but the longer the better);
- change regularly (after all you never knew who club members would be mad with at any one time)

Here is a tip to easily incorporate the principles mentioned here. Use something you love such as music, poetry, books, etc. to help you remember complex passwords. Let us look at an example of how to apply this principal using the song "Change Your Mind" by Sister Hazel:

Yeah yeah  
I bet you haven't heard a word I've said  
Yeah yeah  
If you've had enough of all your trying  
Just give up  
The state of mind you're in:

[Chorus]  
If you want to be somebody else,  
If you're tired of fighting battles with yourself.  
If you want to be somebody else  
Change your mind, change your mind.

"Change Your Mind" Sister Hazel, 2000 Universal Records

1. Start by using the first letter of each word to make up the basis of your password. With a little practice you will surprise yourself with the password length you can remember using this approach.
2. Remember to incorporate one or more Upper case letters
3. Remember to incorporate one or more numbers by substituting a letter with a number. You will find it easier early on to replace letters like "l" with the number "1" and the letter "O" with the number "0" but work to expand on your use of numbers from there. For example replace the sixth letter with the number "6", etc.

The principals applied to this example results in an 11 character password of **"Yy1byhhaw1s"** which incorporates one or more Upper case letters, one or more numbers, is longer than 8 characters and with practice is easy enough to remember as you play the lyrics in your head. The key is to make the principal your own by choosing content that is important to you and are therefore likely to remember. Regular maintenance of your password would simply require following the same process using a different song, poem, book or a different portion of the same song, poem or book.