

Passwords and more

How to cope with computer passwords
and avoid identity theft

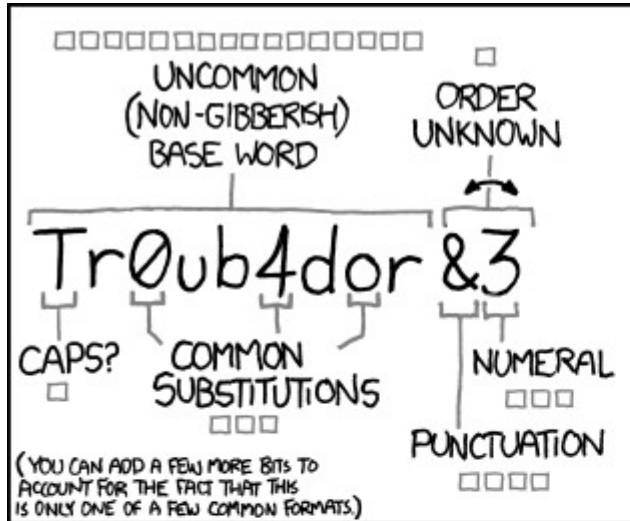
You can download this from
<http://www.totnesit.com/training/>

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Passwords

- They are important
- Why
- The most important after your bank login details are your email
- Had an email from a friend in holiday who has their wallet and passport stolen?
 - Stranded Traveller Appeal Scams
 - <http://www.spamlaws.com/traveler-appeal-scams.html>
tinyurl.com/l88vmh9

XKCD No. 936



~28 BITS OF ENTROPY

$2^{28} = 3 \text{ DAYS AT } 1000 \text{ GUESSES/SEC}$

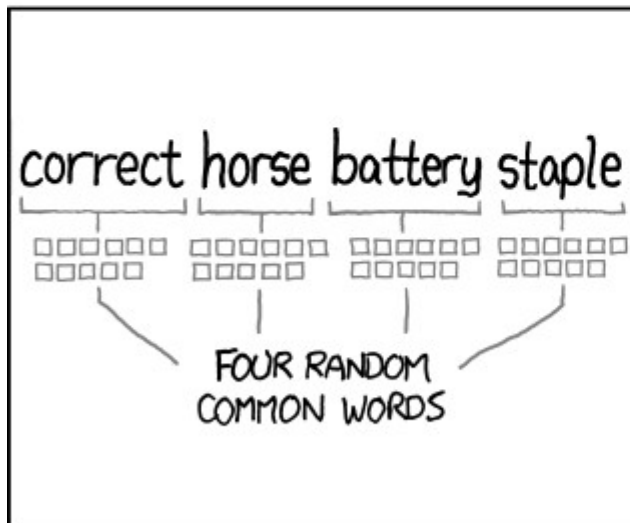
(PLAUSIBLE ATTACK ON A WEAK REMOTE WEB SERVICE. YES, CRACKING A STOLEN HASH IS FASTER, BUT IT'S NOT WHAT THE AVERAGE USER SHOULD WORRY ABOUT.)

DIFFICULTY TO GUESS: **EASY**

WAS IT TROMBONE? NO, TROUBADOR. AND ONE OF THE 0s WAS A ZERO?

AND THERE WAS SOME SYMBOL...

DIFFICULTY TO REMEMBER: **HARD**



~44 BITS OF ENTROPY

$2^{44} = 550 \text{ YEARS AT } 1000 \text{ GUESSES/SEC}$

DIFFICULTY TO GUESS: **HARD**

THAT'S A BATTERY STAPLE.

CORRECT!

DIFFICULTY TO REMEMBER: YOU'VE ALREADY MEMORIZED IT

THROUGH 20 YEARS OF EFFORT, WE'VE SUCCESSFULLY TRAINED EVERYONE TO USE PASSWORDS THAT ARE HARD FOR HUMANS TO REMEMBER, BUT EASY FOR COMPUTERS TO GUESS.

So words are better

- Up to a point
- Web sites still catching up
 - Many only allowing so many letters (characters)
 - And blocking the use of punctuation
- Mistakes made every year
 - Sony 2011 – 1 Million usernames & passwords
 - Target 2013 – 40 million credit cards

Passwords

- Have to be hard and fit for purpose
 - www.adesktopaday.com
 - Passwords and Access → Website Password
- Ideas and tools can be found on this page

Mark Burnett's six rules

- Password, 1234, letmein, and anything else that you see on this common passwords cloud are not passwords
- If you google your password and get more than 10,000 results, it is not a password
- If your password is 8 characters or less, it is not a password
- If you use it on multiple sites, it is no longer a password
- If a password is older than 3 years, it has expired and is no longer a password
- If you tell someone your password, it is no longer a password

Password/Passphrase

- What can go into most password systems?
- These are called characters NOT letters
- Letters are only A-Z and a-z
- Characters include numbers 0-9
- Characters SHOULD but don't always include
 - -+!"£\$%^&*()-=.,
 - *This is a security weakness of many sites*

Ideas for passphrases

- Things that *nearly* only you know
 - What was your first car?
 - What was the colour?
 - Which year did you buy or get given it?
 - The publishing date of your favourite novel?
 - What food do you not like?
 - Put punctuation characters in

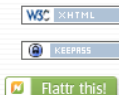
KeePass

- Use a password manager
 - Back the password file up once a....
 - Most passwords can be reset by email....
- Write down the master password!
- Most techies use KeePass
 - <http://keepass.info/>



KeePass Password Safe

KeePass Password Safe



This is the official website of KeePass, the free, open source, light-weight and easy-to-use password manager.

[Awards] [RSS Feed]

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Latest News

- KeePass 2.24 released**
2013-11-03 14:03. [Read More >](#)
- KeePass 2.23 released**
2013-07-20 13:26. [Read More >](#)
- KeePass 1.26 released**
2013-07-12 13:32. [Read More >](#)
- KeePass 2.22 released**
2013-04-05 14:28. [Read More >](#)

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What is KeePass?

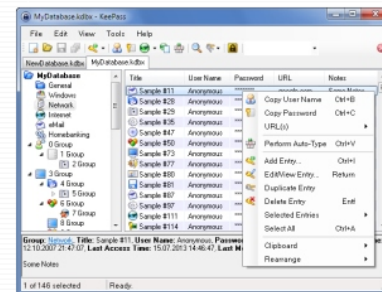
Today you need to remember many passwords. You need a password for the Windows network logon, your e-mail account, your website's FTP password, online passwords (like website member account), etc. etc. etc. The list is endless. Also, you should use different passwords for each account. Because if you use only one password everywhere and someone gets this password you have a problem... A serious problem. The thief would have access to your e-mail account, website, etc. Unimaginable.

KeePass is a free open source password manager, which helps you to manage your passwords in a secure way. You can put all your passwords in one database, which is locked with one master key or a key file. So you only have to remember one single master password or select the key file to unlock the whole database. The databases are encrypted using the best and most secure encryption algorithms currently known (AES and Twofish). For more information, see the [features page](#).

Is it really free?

Yes, KeePass is really free, and more than that: it is open source (OSI certified). You can have a look at its full source and check whether the encryption algorithms are implemented correctly.

As a cryptography and computer security expert, I have never understood the current fuss about the open source software movement. In the cryptography world, we consider open source necessary for good security: we have for decades. Public security is always more secure than proprietary security. It's true for cryptographic algorithms, security protocols, and security...



OtpKeyProv-2.2.zip

Show all downloads...

KeepPass

- Download
- Install
- Create “Key” database file & choose location

Folder structure within KeePass

Identity Theft

- How to protect yourself
- Three major UK credit agencies
- Notice of correction
 - www.freeidprotection.co.uk