

Disclaimer

I am no security expert.

stop using passwords

every time you do, God kills a kitten

User Identity

the use of a password.

the lie.

forced upon.

the joke.

the proposal.



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@qnoid

 Follow

The use of a password is the greatest lie about security the industry has forced upon users and the biggest joke on us.

7:20 PM - 28 Feb 13

1 RETWEET



“the use of a password”

password policy

“a set of rules designed to enhance computer security by encouraging users to employ strong passwords and use them properly.” ¹

1. http://en.wikipedia.org/wiki/Password_policy

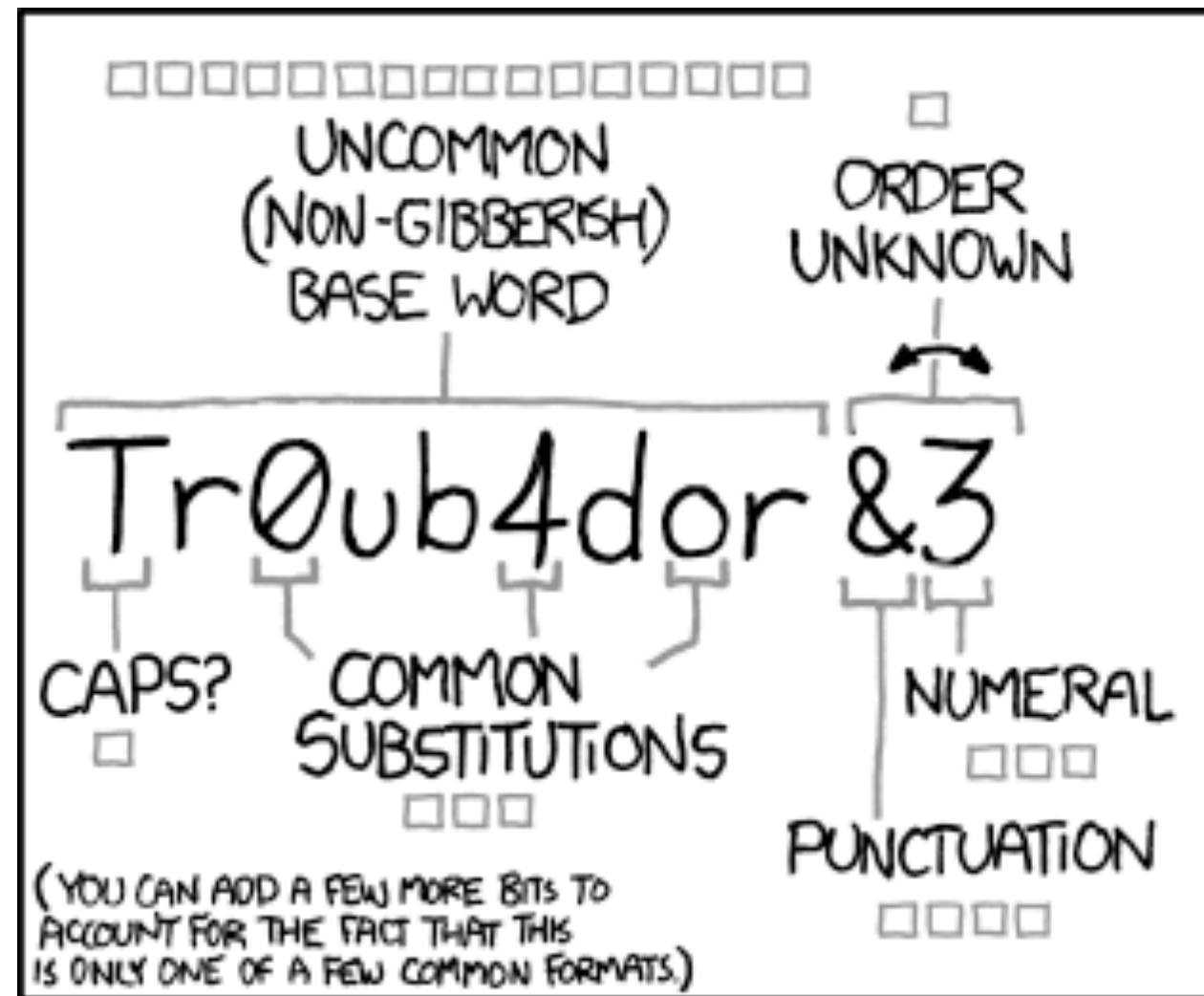
fixed size of 5 numbers (no reuse)

cursed those born in single digit days, single digit months

consonant, vowel, consonant, consonant, vowel, consonant, number, number

“An Environ password”¹

1. http://en.wikipedia.org/wiki/Password_policy



~28 BITS OF ENTROPY

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

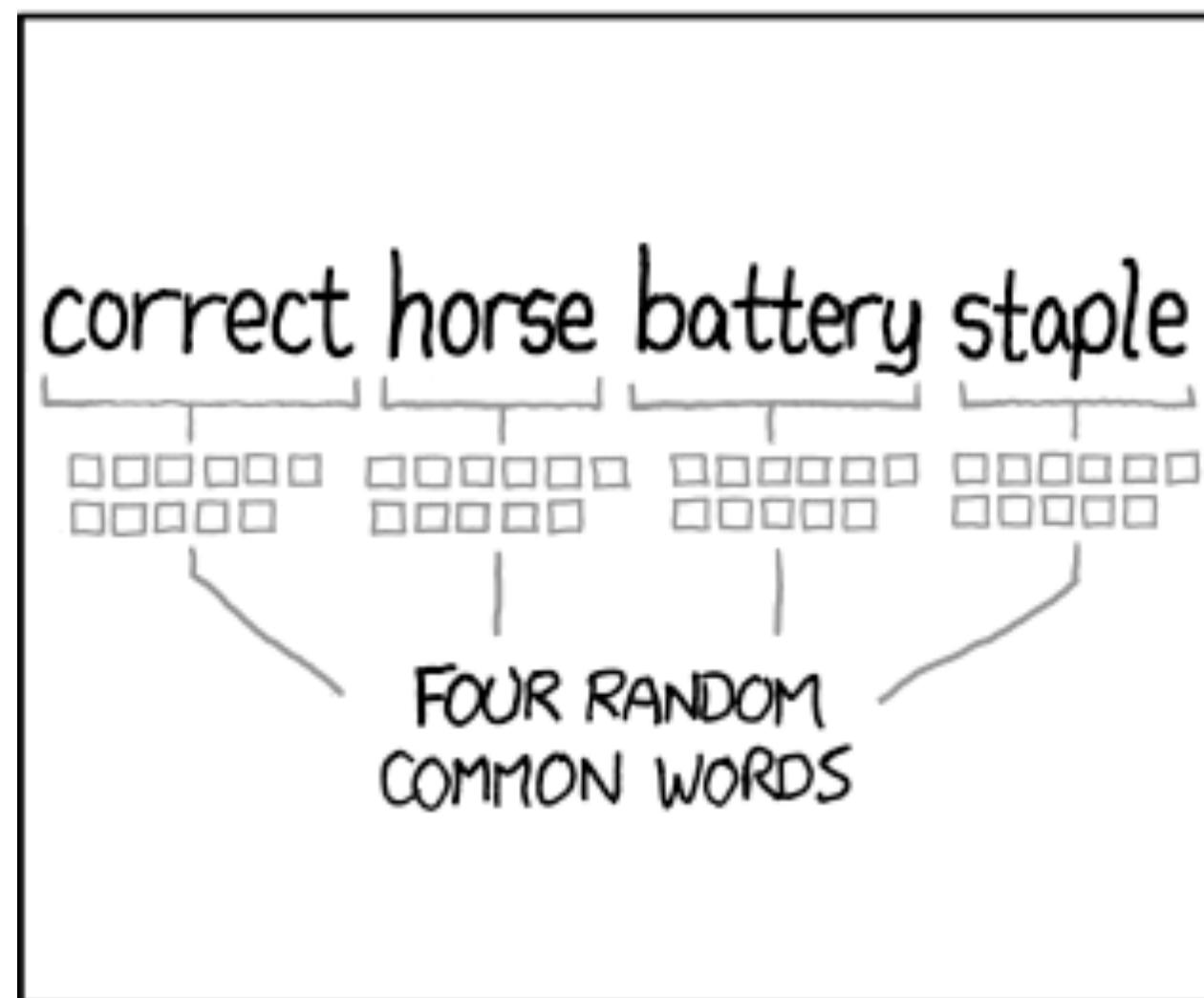
(PLAUSIBLE ATTACK ON A WEAK REMOTE WEB SERVICE. YES, CRACKING A STOLEN HASH IS FASTER, BUT IT'S NOT WHAT THE AVERAGE USER SHOULD WORRY ABOUT.)

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

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

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.

**“Furthermore, for extra security reasons,
a password change is obligatory by the
system every two months.”¹**

just in time you memorised it

security questions

in case you forget your password

What is your oldest cousin's first
and last name?

so good, they made a website¹

1. <http://goodsecurityquestions.com/examples.htm>

Common password practice¹

- never share a computer account
- never use the same password for more than one account
- never tell a password to anyone, including people who claim to be from customer service or security
- never write down a password
- never communicate a password by telephone, e-mail or instant messaging
- being careful to log off before leaving a computer unattended
- changing passwords whenever there is suspicion they may have been compromised
- operating system password and application passwords are different
- password should be alpha-numeric

1. http://en.wikipedia.org/wiki/Password_policy

or else?

“the greatest lie about security”

POST /authenticate

username + password

GET /foo

who are you again?

eureka!

I know who you are

Session ID

let me put this right here

wait, wat?

what has just happened

but, it's personal

only I have access to the computer

but, it's short-lived

yes, but how long?

0

down to the millisecond

“has forced”

no password = no access

please state your name

and by the way, I need you to think of a password

“biggest joke on us”

you should be able to tell by now

so why do I need a password again?

you are using it wrong

password = genius

albeit primitive

user identity

openid

still need to create an account (password?)

oauth

more than authentication, yay!

innovate

@xoxco
Ben Brown

<http://notes.xoxco.com/post/27999787765/is-it-time-for-password-less-login>

@lukew

Luke Wroblewski

<http://www.lukew.com/ff/entry.asp?1487>

@marcoarment
Marco Arment

<http://www.marco.org/2013/02/24/the-magazine-sharing>

Discussion

<http://goo.gl/H5z0w>



how does security work?

discussion with a RSA employee¹

“security by the book”

1. <http://goo.gl/YCYIC>