



Manajemen Password

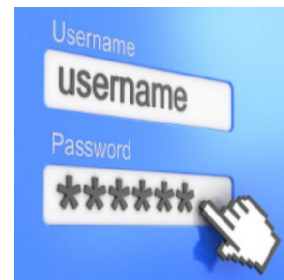
Kasus!

- Menggunakan program yang namanya **Brutefore/dictionary attack** yang akan mencoba berbagai macam kombinasi password untuk mendapatkan password akun anda...(vaksin.com)

Panjang password 8 karakter		Komputer / Max. Waktu Bruteforce			
Jenis Karakter	karakter	Kombinasi	Pent 100/MS Off.	Dual core	Super komp.
			10.000 ps/dtk	10jut ps/dtk	1milyar ps/dtk
Tanpa kombinasi					
Angka saja	10	100 juta	2,75 jam	10 detik	instan
Huruf kecil / besar saja	26	200 milyar	242 hari	348 menit	3,5 menit
Kombinasi					
Huruf besar + kecil	52	53 triliun	169,5 tahun	62 hari	15 jam
Huruf besar + kecil + angka	62	218 triliun	692 tahun	253 hari	60,5 jam
Huruf besar + kecil + angka + simbol	96	7,2 quadriliun	22.875 tahun	23 tahun	83,5 hari

Kegunaan Password

- *Protect* (Melindungi)
- *Arrange* (Mengatur. Ex : hak user)
- *Verifikasi* (Memastikan. Ex : sengaja)
- *Memfilter* (Membatasi. Ex : data))



Password, Passphrase, Passcode

- **Password** : Sandi yang berbentuk sebuah kata yang diperlukan seseorang untuk mengakses data atau sistem
 - **Passphrase** : Jika sandi terdiri dari lebih dua **kata** atau lebih. Contoh : budianduk, tahusumedang, satemadura
 - **Passcode** : Sandi berupa kombinasi dari jumlah karakter dengan **angka** saja. Contoh : pin banking atau atm

Permutasi $\frac{(n + r - 1)!}{r!(n - 1)!}$

Selections	Combinations	Permutations
3	220	1,000
6	5,005	1,000,000
7	11,440	10,000,000
8	24,310	100,000,000
9	48,620	1,000,000,000
10	92,378	10,000,000,000
11	167,960	100,000,000,000
12	293,930	1,000,000,000,000
13	497,420	10,000,000,000,000
14	817,190	100,000,000,000,000
15	1,307,504	1,000,000,000,000,000



Character

- Berdasar Jumlah
- Berdasar Jenis

- **Numbers** Digits 0 through 9
- **Lowercase letters** Lowercase letters from a through z
- **Uppercase letters** Uppercase letters from A through Z
- **Symbols** Other punctuation and symbols such as the tilde (~), asterisk (*), or equals sign (=).

Character Groups

- Lowercase: abcdefg
- Uppercase: ABCDEFG
- Numeric: 0123456789
- Special: . , ? % \$ # @ !
- 9 User-Defined and 4 Phonetic

One Character Set:

- applepie
- 6565656

Two Character Sets:

- HappyCamper (uppercase and lowercase)
- notnothing! (lowercase and symbol)

Three Character Sets:

- 677Mustangs (uppercase, lowercase, numbers)
- wrong3@email.com (lowercase, symbols, number)

All Four Character Sets:

- Different-2day
- 4 Broken (shellfish)
- Www2.example.com

Symbol

- **Punctuation** Punctuation symbols for your language such as the period (.), comma (,), or apostrophe (").
- **Keyboard symbols** Non-punctuation symbols found on a standard keyboard, such as the tilde (~), backslash (\), or pipe (|).
- **Non-keyboard symbols** Printable characters that do not appear on a standard keyboard and require special key sequences to type, such as the copyright symbol (©), the diaeresis (¨), or the inverted question mark (¿).
- **Nonprintable characters** Special control characters that do not print but that you can sometimes, rarely, use in passwords. This includes characters such as the backspace, enter, or tab.

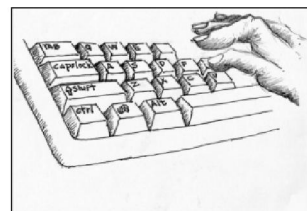
Long Password

Keuntungan

- ☐ Mudah diingat
- ☐ Mudah diketik
 - ☐ Terbukti lebih mudah mengetik kalimat
- ☐ Lebih sulit dipecahkan

- Sup3rm@n
- Br9T&o2_
- Bl4CK-hAt
- Y*c77pw\$
- 4W5T1UP

- skyisfalling
- in a coalmine.
- walnut-flavored
- orange toothpaste
- a hundred pesos



Kemungkinan Tebakan

Table 5.1 To Strengthen a Password, You Can Increase Its Length or Make Use of More Character Sets

Length	Lowercase Only	All Keyboard Characters
3	17,576	857,375
4	456,976	81,450,625
5	11,881,376	7,737,809,375
6	308,915,776	735,091,890,625
7	8,031,810,176	69,833,729,609,375
8	208,827,064,576	6,634,204,312,890,620
9	5,429,503,678,976	630,249,409,724,609,000
10	141,167,095,653,376	59,873,693,923,837,900,000
11	3,670,344,486,987,780	5,688,000,922,764,600,000,000
12	95,428,956,661,682,200	540,360,087,662,637,000,000,000
13	2,481,152,873,203,740,000	51,334,208,327,950,500,000,000,000
14	64,509,974,703,297,200,000	4,876,749,791,155,300,000,000,000,000
15	1,677,259,342,285,730,000,000	463,291,230,159,753,000,000,000,000,000

Cara Membuat Long Password

- Tambah Kata Lain
- Bracketing
- Tambah Numeric

Before	After
Marty29 (seven characters)	Marty29-thumbna1l (17 characters)
Shopping (eight characters)	Goin' shopping (14 characters)
4Chewbacca (ten characters)	4Chewbacca—chewy (16 characters)
Broncos (seven characters)	Broncos helmet. (15 characters)

Table 5.3 Bracketing Your Password

Before	After
Starfleet (nine characters)	*Starfleet* (11 characters)
Sugarless (nine characters)	"sugarless" (11 characters)
buyingmoretime (14 characters)	buying(more)time (16 characters)
jamesjames (ten characters)	< jamesjames > (14 characters)
Dawghouse (nine characters)	< —dawghouse—> (14 characters)

Before	After
Dolphins (eight characters)	Dolphins #919 (13 characters)
JudgeJudy (nine characters)	JudgeJudy 4:00pm (16 characters)
sphYnx (six characters)	\$4.99 sphYnx (12 characters)
terriers (eight characters)	93033 terriers (14 characters)

Cara Membuat Long Password

- *Fun Word*
- *Repetition*
- *Prefix Suffix*
- *Colorizing*
- *Sentences*

3 Salah Membuat Passw

- Login dan Password = SAMA
- Ingatan Umum, ex: Nama, Tglahir, Idnumber
- Layout Keyboard, = 123, sdf, cxz

Password Terburuk

3 password terburuk : **"password," "123456," dan "12345678"**

25 password terburuk versi **Splashdata.com**

- | | |
|------------------------|-----------------------------------|
| 1. password (tetap) | 13. 1234567 (turun 6) |
| 2. 123456 (tetap) | 14. sunshine (naik 1) |
| 3. 12345678 (tetap) | 15. master (turun 1) |
| 4. abc123 (naik 1) | 16. 123123 (naik 4) |
| 5. qwerty (turun 1) | 17. welcome (baru masuk daftar) |
| 6. monkey (tetap) | 18. shadow (naik 1) |
| 7. letmein (naik 1) | 19. ashley (turun 3) |
| 8. dragon (naik 2) | 20. football (naik 5) |
| 9. 111111 (naik 3) | 21. jesus (baru masuk daftar) |
| 10. baseball (naik 1) | 22. michael (naik 2) |
| 11. iloveyou (naik 2) | 23. ninja (baru masuk daftar) |
| 12. trustno1 (turun 3) | 24. mustang (baru masuk daftar) |
| | 25. password1 (baru masuk daftar) |

Tips Membuat Passw

- Min 8 karakter. Atau lebih panjang
- Gabungan dari upper, lowercase characters, numbers, punctuation marks dan special characters.
- It must be meaningless. If a password is hard to remember, it is also hard to guess.
- Periode penggantian. Ex : 2 bulan

Metoda Klasik

Letter	A B	C D	E F	G H	I J	K L	M N	O P	Q R	S T	U V	W X	Y Z
1 st	a	!x	Ju	2w	X	l	mn	8d	b2	9l	fo	Pz	_u
2 nd	6C	8w	jQ	4Z	iu3	9X	jv	49	1	vYh	D	dX	Y6
3 rd	AN6	q2D	lc	2	C	DDx	K3	87X	32U	XC	53X	xS	3ju
4 th	Xsa	Odb	nSu	pX56	76d	a	Xo	Ci	C76	Ocx	sa	V9	xs7
5 th	mM	nal	S9	s2	o_2	uh	x7Dq	enb	59l	hx7	n	zpX4	saU8

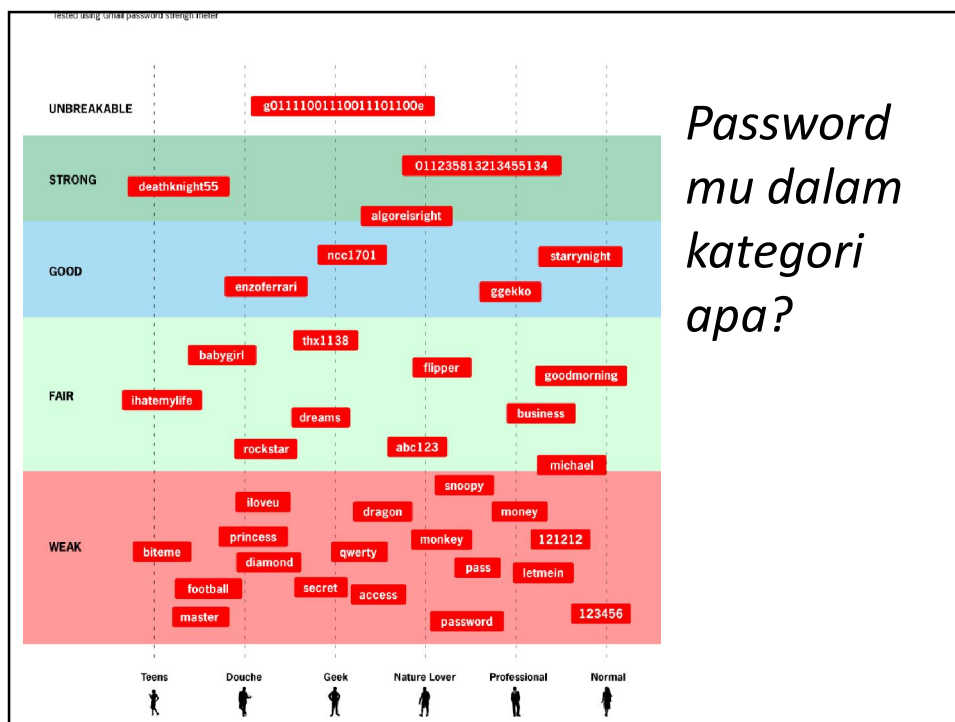
Letter	A B	C D	E F	G H	I J	K L	M N	O P	Q R	S T	U V	W X	Y Z
1 st	a	!x	Ju	2w	X	l	mn	8d	b2	9l	fo	Pz	_u
2 nd	6C	8w	jQ	4Z	iu3	9X	jv	49	1	vYh	D	dX	Y6
3 rd	AN6	q2D	lc	2	C	DDx	K3	87X	32U	XC	53X	xS	3ju
4 th	Xsa	Odb	nSu	pX56	76d	a	Xo	Ci	C76	Ocx	sa	V9	xs7
5 th	mM	nal	S9	s2	o_2	uh	x7Dq	enb	59l	hx7	n	zpX4	saU8

- Contoh membuat password untuk akun di www.amazon.com, maka :
 - 1st letter is a –> a (Column 2, Row 1)
 - 2nd letter is m –> jv (Column 7, Row 2)
 - 3rd letter is a -> AN6
 - 4th letter is z -> xs7
 - 5th letter is o –> enb
- Maka password jadinya : **ajvAN6xs7enb.**

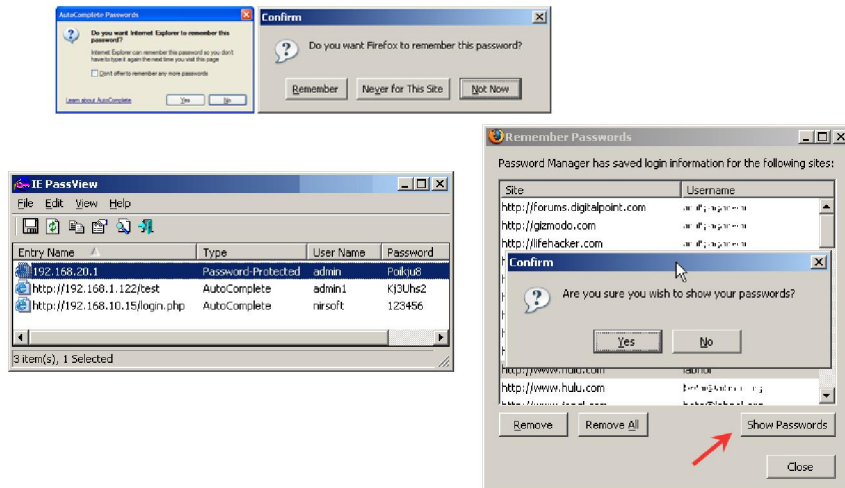
How Strong is your Password?

- <http://www.passwordmeter.com/>

Test Your Password		Minimum Requirements			
Password:	••••••••	<ul style="list-style-type: none"> Minimum 8 characters in length Contains 3/4 of the following items: <ul style="list-style-type: none"> Uppercase Letters Lowercase Letters Numbers Symbols 			
Hide:	<input checked="" type="checkbox"/>				
Score:	71%				
Complexity:	Strong				
Additions		Type	Rate	Count	Bonus
	Number of Characters	Flat	$+(n*4)$	11	+ 44
	Uppercase Letters	Cond/Incr	$+(len-n)*2$	1	+ 20
	Lowercase Letters	Cond/Incr	$+(len-n)*2$	8	+ 6
	Numbers	Cond	$+(n*4)$	2	+ 8

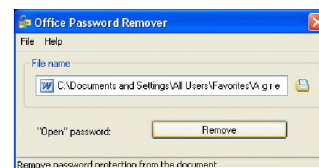
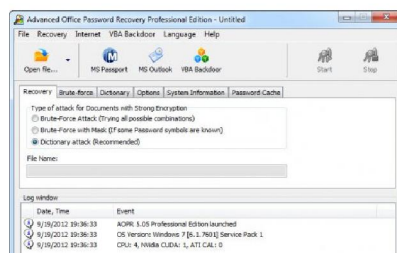


Remember password ?



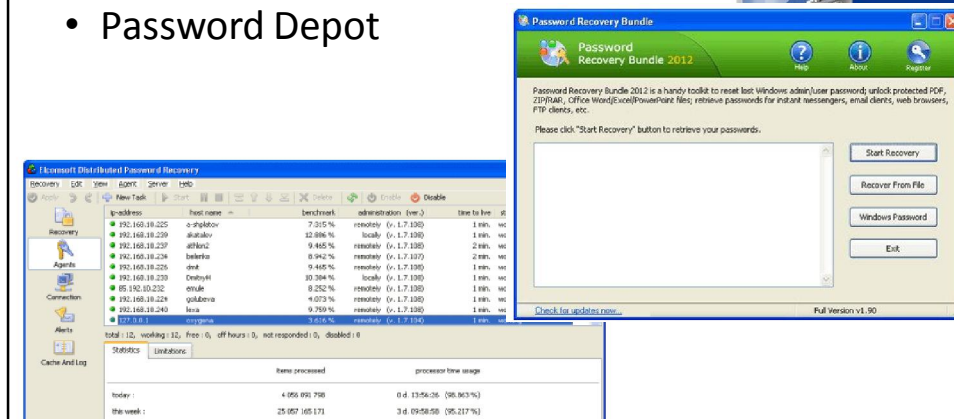
Office Hack Password

- Passwor
- Advance
- Passwor



Office Hack Password

- Elcomsoft Password Recovery
- Password Recovery Bundle
- Password Depot



Bagaimana passw anda?

Mana yang anda pakai ?

✓ joko

✓ JOKO

✓ joko65

✓ Joko65

✓ J0k065

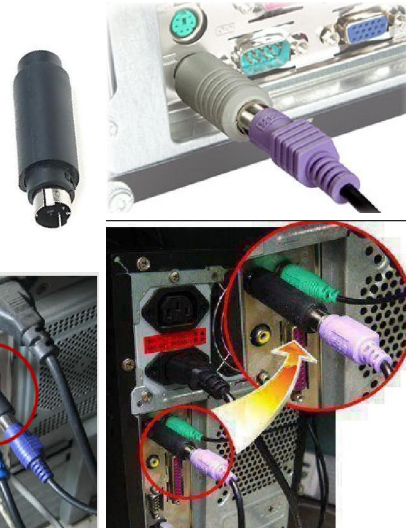
✓ joK065



Musuh utama ? (1)

- **Hardware Key logger**

- Memory 2 Mb
- 2.000.000 ketik
- Txt
- Plug play
- IDR 1,6jt



Solusinya ?

- **Remove**
- Tidak menggunakan Keyboard Fisik. Tapi Memakai virtual keyboard ex: osk



Musuh utama ? (2)

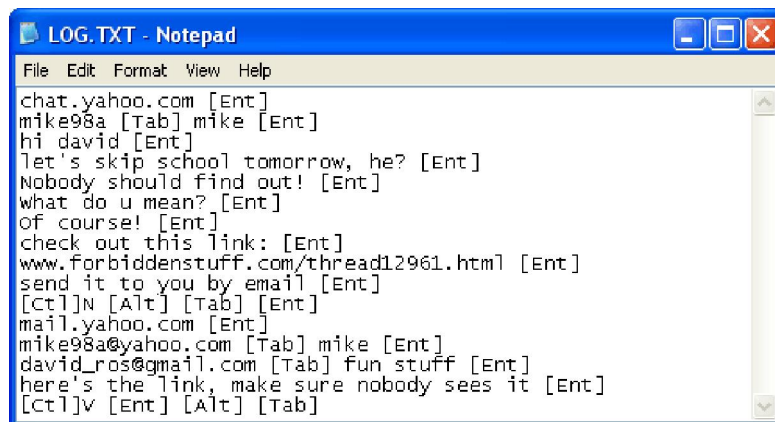
- **Software Keylogger**

- | | |
|--|--|
| 21. Golden KeyLogger 1.32 | 1. 007 Keylogger Spy Software 3.873 |
| 22. Handy Keylogger 3.24 build 032 | 2. Active Key Logger 2.4 |
| 23. Home Keylogger 1.77 | 3. Activity Keylogger 1.80.21 |
| 24. Inside Keylogger 4.1 | 4. Activity Logger 3.7.2132 |
| 25. iOpus Starr PC and Internet Monitor 3.23 | 5. ActMon Computer Monitoring 5.20 |
| 26. iSpyNow v2.0 | 6. Actual Spy 2.8 |
| 27. KeyScrambler 1.3.2 | 7. Advanced Invisible Keylogger v1.9 |
| 28. Keystroke Spy 1.10 | 8. Advanced Keylogger 1.8 |
| 29. KGB Keylogger 4.2 | 9. Ardamax Keylogger 2.9 |
| 30. KGB Spy 3.84 | 10. BlazingTools Perfect Keylogger 1.68 |
| 31. LastBit Absolute Key Logger 2.5.283 | 11. Blazingtools Remote Logger v2.3 |
| 32. Metakodix Stealth Keylogger 1.1.0 | 12. Data Doctor KeyLogger Advance v3.0.1.5 |
| 33. Network Event Viewer v6.0.0.42 | 13. Local Keylogger Pro 3.1 |
| 34. OverSpy v2.5 | 14. ExploreAnywhere Keylogger Pro 1.7.8 |
| 35. PC Activity Monitor Professional 7.6.3 | 15. Family Cyber Alert 4.06 |
| 36. PC Spy Keylogger 2.3 build 0313 | 16. Family Keylogger 2.80 |
| 37. PC Weasel 2.5 | 17. Firewall bypass Keylogger 1.5 |
| 38. Personal PC Spy v1.9.5 | 18. Free Keylogger 2.53 |
| 39. Power Spy 6.10 | 19. Ghost Keylogger 3.80 |
| 40. Powered Keylogger v2.2.1.1920 | 20. Golden Eye 4.5 |

AntiLogger (Freeware)

- **KeyScrambler Personal**
<http://www.qfxsoftware.com/Download.htm>
- **I Hate Keyloggers**
<http://dewasoft.com/privacy/i-hate-keyloggers.htm#download>
- **PSMAntiKeyLogger**
<http://sourceforge.net/projects/psmantikeylogger/files/>
- **SnoopFree Privacy Shield**
<http://www.snoopfree.com/PrivacyShield.htm>
- **MyPlanetSoft Anti-Keylogger**
<http://www.myplanetsoft.com/free/antikeylog.php>

Hasil File Logger



```

LOG.TXT - Notepad
File Edit Format View Help
chat.yahoo.com [Ent]
mike98a [Tab] mike [Ent]
hi david [Ent]
let's skip school tomorrow, he? [Ent]
Nobody should find out! [Ent]
what do u mean? [Ent]
of course! [Ent]
check out this link: [Ent]
www.forbiddenstuff.com/thread12961.html [Ent]
send it to you by email [Ent]
[Ctrl]N [Alt] [Tab] [Ent]
mail.yahoo.com [Ent]
mike98a@yahoo.com [Tab] mike [Ent]
david_ros@gmail.com [Tab] fun stuff [Ent]
here's the link, make sure nobody sees it [Ent]
[Ctrl]v [Ent] [Alt] [Tab]

```

Pada prinsipnya **Tidak Ada password yang tidak bisa** ditebak, jadi serumit apapun password yang kamu buat, jika dilakukan percobaan atas segala kombinasi 'suatu saat' **pasti** akan bisa tertebak.

