Data Security

... Passwords

Dave Botherway

BEAST SIG

Nov-2019

The 'Passwords' Problem

- Expanding use of PCs for Personal data needing protection
- Most protected by a User ID and a Password else by recognition - Face, Voice, Finger Print etc
- To beat Hackers, complex and separate passwords needed
- Difficulty remembering IDs and complex Passwords
- Need a Password manager to generate and store PSWs, with Multi Device synchronisation

Password Manager – Desired Functions

- Import from existing Browsers (or other PSW Managers)
- PSW generation, with User defined complexity
- Two Factor Authorisation (2FA) Email or Mobile Phone
- Browser Extensions for all common browsers
- Record other details eg. Credit Cards, Bank details
- Folder organisation of PSWs
- Local storage for offline use
- Multiple devices (Pc, Tablet, Phone) and OS
- Cloud storage for multi device synchronisation

Password Managers

- Last Pass free + paid
- Dash Lane free (only 50 PSWs), else paid
- KeePass (open source)
- 1Password no free version, only free trial
- Firefox Lockwise (new browser addition)
- Bitwarden (open source)

Password Manager Comparisons

	LastPass	Dashlane	Bitwarden	1Password
Browser extensions?	✓	~	✓	
Mobile apps?	~		~	
Two-factor authentication?	✓	~	~	
Family plans?	~	×	~	
Open source?	×	×	✓	×
Free plan?	✓	★*	~	×
Starting price for pro?	\$36 per year	\$40 per year	\$10 per year	\$36 per year

Simplify your life.

LastPass remembers all your passwords, so you don't have to.

Get LastPass Free

Upgrade to Premium for Just \$3/Month >

•••		000
facebook	amazon	salesforce
Password	Shipping Address	New Password
····· 📃	17 Main St. New York, NY 10044	•••••••
C LastPassI @	C LastPass 9	د LastPass ۰۰۰۱ ه
PASSWORDS	FORM FILLS	GENERATE PASSWORD
Facebook name@example.com	My Mastercard	d4dx1q!Rb*li
FORM FILLS	My Billing Address	Password length Vppercase
VISA Corporate Visa Ending in 6789 • Expires 12/21		Easy to say 🛛 🗹 Numbers
		Easy to read 🛛 🗹 Symbols
My Billing Address	LastPass	All characters

A better digital life starts here

30-DAY MONEY-BACK GUARANTEE

Dashlane

Select your plan:

Free USD ()

Manage up to 50 passwords and autofill all your personal information on your favorite device, free for life. Most popular

Premium USD **3**^{.33}/MO

billed annually

Manage unlimited passwords on unlimited devices, plus Dark Web Monitoring and secure VPN.

Get Free

Get Premium



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. Home 💜 [Awards] 🔝 [RSS Feed] Home & News Latest News Forums Feature List KeePass 2.43 released MyDetabase.kdbx - KeePass Screenshots 2019-09-10 14:53. Read More » File Edit View Tools Help न 📴 🗔 🖉 💐 🕹 । 🔒 🔋 📾 - 🐑 💩 🔍 🕸 । NewDatabase kidba MsD stabase kidba KeePass 2.42 (2.42.1) released 😰 HyDatabase Getting KeePass Title Uper Name Notez 🗀 Gerenal Sample #11 2019-05-01 14:46. Read More » Anoremou. Windows Copy User Name Downloads CM+B 5 ample #28 Amoremous Network. Sample #29 Anoreneous Copy Password Chi+C Internet. Sample #35 Anoremous al-Hai URL(ii) Bug Bounties (EU-FOSSA 2) Translations 5 Sample #47 Anonemous Homebanking Sample #50 Amoremous Perform Auto-Type Onl+V 0 Group 2019-01-15 20:17. The European Commission sponsors bounties Sample #73 1 Group Anoremau Oul+I Plugins / Ext. Add Entry 2 Group Sample #77 Anoremou for finding security vulnerabilities in KeePass 2.x (EU-FOSSA 2 a 🥅 3 Group Sample #80 Anoremou EdiMiew Entry. Return # 🛐 4 Group Sample #81 Anoramous project). Read More » Duplicate Entry 5 Group Sample #87 Anoremau **Delete Entry** Enti # 🕎 6 Gioup Sample #57 Anoremous Information / WWW 🖻 7 Gene Selected Entries 5ample \$111 Amoremous KeePass 2.41 released 8 Group Sample \$114 Amorganous Select All Chi+A Help Title: Sample #11. User Name: Anonymous, Passwo 2019-01-09 15:34. Read More » Clipboard 2 10:2007 21:47:07, Last Access Time: 15:07.2013 14:46:47, Last H FAQ Reamange ٠ Some Notes [News Archive] 1 of 146 selected Ready. Security Awards What is KeePass? Links 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 Support KeePass you use only one password everywhere and someone gets this password you have a problem... A Donate



The 1Password you need to remember

With 1Password you only ever need to memorize one password. All your other passwords and important information are protected by your Master Password, which only you know.

1 Password





Take your passwords everywhere

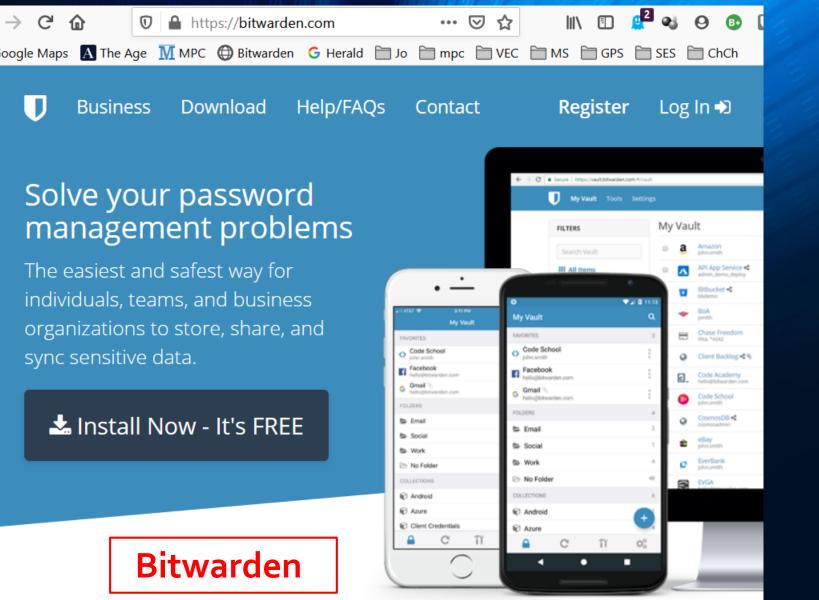
Securely access the passwords you've saved in Firefox from anywhere — even outside of the browser.



Try Lockwise now

Open in Firefox

Firefox Lockwise	
Q Search logins	
refoxlockbox@gmail.com	1:30
ccounts.google.com refoxlockbox@gmail.com	
ccounts.snetgclxtzgjcljrjofovp.org akeTester25	*******
imazon.com	
arncyvuzox.co.uk akeTester33333	
biqmxkbiih.org akeTester44	<u>í</u>
esttesttest	Firefox
bylsezrkaic.org akeTester90	Lockwise Take your passwords everywhere
aqqmp.com akeTester36	Get Started
yozruwqemyfret.net akeTester2	To use Firefox Lockwise, you'll need a
lerkcjmhbvwhggpgmtgfuwkflhxt.com akeTester69	Firefox Account with saved logins.



CodeinWP Summary

https://www.codeinwp.com/blog/best-password-manager/

- If you want the best free password manager, you should choose LastPass or Bitwarden.
- If you want something that's *more* than just a password manager, you should choose Dashlane.
- If you want something that's a one-time purchase, you should choose
 1Password also our overall best password manager in this comparison.

PSW Manager Summary

- Need to upgrade Password protection
- Seperate and complex PSWs needed
- Management tool needed
- Choose one, anyone better than none
- Bitwarden seems a great solution