bitwarden Video: Consolidated

bitwarden Video: 1 (Introduction)

Chapter 1

Purpose

Hello, this tutorial's goal is to help people who've decided they need to get their act together in regards to managing their passwords, and have chosen bitwarden for that purpose. I personally think it's a great choice, as bitwarden has no bloat of tech features you don't want or need - it's solely concentrated on essential password management features. Just for reference, I'm making this tutorial June 2022.

About Me

I'll quickly advise you that my name is David and I come from Stoke-on-Trent in central England. I work in IT security, and have developed a passion for voluntary work, where I assist the elderly, or those generally bewildered by the *digital world*. I find myself in roles which go by the names of "IT buddy" or "digital friend" - I think both terms are cool. My favourite activity is demystifying the challenge of managing passwords, by delivering what I call 'good enough' security. I enjoy explaining how this can be achieved without needing skills akin to a rocket scientist, or requiring passwords which resemble ancient Egyptian hieroglyphics.

It'd be dishonest of me to say that using bitwarden is **dead easy**. It's a grown-up tool, designed to be used on 'grown-up' tasks. There's a learning curve which you'll need to commit to, but it's a skills journey very much worth going on. I think it's got to be worth spending a few hours persevering with learning bitwarden, such that you reach the stage where you become comfortable with managing your passwords. I'm hopeful that this tutorial will be of help to you in reaching that goal, but I'm aware that my explanations and instructions won't be to everyone's taste. If this is the case for you, please don't give up on bitwarden - have a look for tutorials elsewhere. One way or another, if you persevere with bitwarden, I'm certain you'll reach a great outcome.

Video Structure

I've segmented this video into eight chapters - which you can now see displayed on your screen.

- Chapter 1 is this introduction
- In Chapter 2 I'll give you a few practical ideas to consider with the bitwarden master password *bitwarden Master Password*
- In Chapter 3 I demonstrate using a Google Chrome browser to create a brand new bitwarden vault account *Creating a bitwarden Vault Account*
- In Chapter 4 I install bitwarden software for browser integration *Installing the bitwarden Browser Extension*
- In Chapter 5 I create bitwarden password records, while logging on at web sites with existing credentials *Using the bitwarden Browser Extension*
- In Chapter 6 I create a bitwarden password record in advance, so that it's ready to use when logging on at the target web site *Using the bitwarden Web Vault*
- In Chapter 7 I explain how passwords you already have saved in your browser can be transferred into bitwarden *Export & Import of Browser Passwords*

• In Chapter 8 I demonstrate some of the things you can do with the bitwarden mobile device app *bitwarden on Mobile Devices*

If you inspect the YouTube description area, you'll see the chapters listed as a 'table of contents'. I'm hopeful that you use this tutorial as something to refer back to intermittently as you start on your bitwarden journey, rather than try to consume it in one fifty minute or so block! I've also put a link to a PDF of this script I'm reading from in the YouTube description area, you can then use the script to follow the narrative at your own pace.

Bitwarden Architecture

Here's a tiny bit about the bitwarden 'architecture'. The bitwarden vault (I'll pretend it's a database), where you record your passwords, is located in the cloud, i.e. not directly on your computer or mobile device. For those among you with a techie interest in these matters, bitwarden.com and all of the associated paraphernalia utilises the Microsoft Azure cloud platform. Your cloud based vault is securely encrypted using a 'bitwarden master' password, which you establish when you create your bitwarden.com vault account. I should add at this stage that bitwarden is widely respected in the IT security community. It's open source software, and therefore open to public scrutiny by all of the experts out there.

There's no need to install any software on a desktop if that's your prime device. There is a desktop app you can install if that's your preference, but you can do everything you need in bitwarden solely by using a browser.

When using a mobile device, you will need to install a Bitwarden app, which has access to a synchronized copy of your bitwarden vault. This means that you can access lists of your passwords when your device is offline, while the "master copy" so to speak, is always stored in the cloud. In addition to supporting application login on your mobile device, the bitwarden mobile app can simply be used as an account name and password register. This can be helpful when you're using a computer at work, or at a friend's house, or on a shared computer at a hotel, etc. In these circumstances, you typically just want to be able to retrieve the necessary account name and password from your device to use on a particular web site.

When using bitwarden on mobile devices, synchronisation with your cloud vault is done 'automagically'. I shan't describe bitwarden's architecture any more than that. For those to whom it'd be of value everything is fully documented on <u>bitwarden.com</u>.

bitwarden Video: 2 (Bitwarden Master Password Guidance)

Chapter 2

You'll need a very good bitwarden master password, as it's the key to your front door, so to speak. If you already have ideas about how to create a strong password, that's great, otherwise I'd recommend you follow the UK's National Cyber Security Centre's advise of creating a password based on what they refer to as 'three random words'. In a nutshell, it's more important to have a longer password (over thirty characters) based upon three recognisable words, than get hung up on using an obscure variety of characters, which can result in a password that ends up looking like ancient Egyptian hieroglyphics. There's a link to the relevant page on NCSC's web site in the YouTube description area. *Show printout of example passwords*

By way of example of the "three random word" password approach, 'Charming Beautiful Amsterdam' and 'Ridiculous Unbelievable Transylvania' are both entirely suitable. You might be unaware that the spaces between the three words are legitimate complex characters - akin to exclamation marks or dollar signs. I'd suggest that you also include a number somewhere in your password, purely because most web sites demand that your passwords one.

I strongly advise you to come up with a method for writing down your bitwarden master password on paper. In essence, you need an approach for recording your master password, beyond relying upon your memory. In the event of you forgetting it, there's no 'emergency - break glass' option. Part of the strength of bitwarden's architecture, is that bitwarden application and support staff aren't in any position to facilitate a reset of your master password.

bitwarden uses an email address as the username for your account, if you plan to use a gmail, or Yahoo, or Outlook, or iCloud email address, etc. that's entirely fine. Here's a tip you'll ignore. () Now is a very good time for you to update your email account password with a stronger one. I imagine you'll likely be thinking "it's just too much hassle." Really, is taking ten minutes to update your password on your computer, tablet and phone such a big deal? You're investing time and effort in sorting out your passwords in general by going down the bitwarden route, it makes perfect sense to make your email account password suitably strong at this time. Like your bitwarden master password, I recommend that you record your email password somewhere on paper.

Show printout of Glorious Buckingham Elizabeth passwords

Before going online to create a bitwarden vault account, I'm going to evidence how it's perfectly feasible to have an account name and password determined right at the beginning of the process. You can see on your screen the credentials I am going to use for all of this tutorial.

Email Address: davew30000@googlemail.com Password: Glorious Buckingham Elizabeth 70 Password: Glorious-Buckingham/Elizabeth#70

This password is considered suitably strong since it's:

- 1. Un-guessable
- 2. Over thirty characters in length
- 3. Contains upper and lower case letters and numbers
- 4. Contains complex characters (the spaces)

I'll re-iterate what I said earlier - you really need to think of a suitable method for recording your chosen bitwarden master password on paper. I've given an example (in red) of how I might write down the master password, where you can see that I've replaced the spaces with special characters - that does the job perfectly well.

I want to reassure you that you don't need to go through this exercise for all of the various accounts you have, this is just for your bitwarden master password - and perhaps your email password. Going forward, it's recommended that you'll let bitwarden create passwords for your various accounts. You can do this because you won't need to remember any of them yourself - bitwarden will help you reach password nirvana.

I've deliberately positioned this chapter before undertaking any interactive tasks, as I feel you should create and record your bitwarden master password before you even think about accessing <u>bitwarden.com</u>.

bitwarden Video: 3 (Creating a bitwarden Vault Account)

Preparation

- Delete my bitwarden account
- Delete bitwarden browser extension
- Have note open in Notepad

Chapter 3

I'll now be recording web browser activity (rather than my mugshot), such that you can watch various tasks performed interactively. I'll be going through this chapter very steadily, so that you can carefully watch what I'm doing, rather than give you the impression that I want this exercise over and done with as fast as possible.

Show printout of Glorious Buckingham Elizabeth passwords

a. Create Account

My first task is to start Google Chrome and open www.bitwarden.com. In the page which appears, I click the '**Log In**' link in the top right corner of the screen, I then click on the '**Create Account**' button. I shall now begin entering the account details which you can see on the screen.

Create Account			
Email Address			
davew30000@googlemail.com			
You'll use your email address to log in.			
Your Name			
David Wotsit			
What should we call you?			
Master Password			
Glorious Buckingham Elizabeth 70 🚿			
The master password is the password you use to access your vault. It is very important that you do not forget your master password. There is no way to recover the password in the event that you forget it. Re-type Master Password			
Glorious Buckingham Elizabeth 70 🚿 🚿			
Master Password Hint (optional)			
Queen			
A master password hint can help you remember your password if you forget it.			
By checking this box you agree to the following: Terms of Service, Privacy Policy			
Submit Cancel			

I've pasted in the Email Address, which you can see.

The name field (**David Wotsit**) is used as a label - it's not actually an identifying attribute in my bitwarden account.

For practical purposes in this tutorial, I'm copying and pasting the password from a text file. I'll repeatedly use the show password button (an eye graphic) whenever I paste password values - this isn't something you'd ordinarily need to do.

I say this one last time 🙂 you really should make a record of the bitwarden master password somewhere, please don't solely rely upon your memory.

The **password hint** is simply a memory trigger, I'll use the word Queen.

Finally, I click on the **Submit** button.

I hope you'd agree that having established the password <u>before</u> I went online, took any drama out of the bitwarden account creation process.

b. Account Created

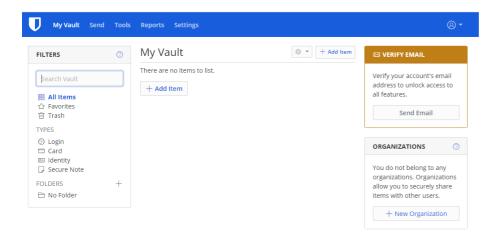
A bitwarden login panel appears, which can be used to access my new bitwarden password vault. I enter my bitwarden password.

I ensure that the 'remember email' checkbox is checked.

There's a human or web bot detection prompt. Because I am actually a human being, I click the checkbox to confirm as such and click **Log In**. If you're not human, please click the cancel button 🙂

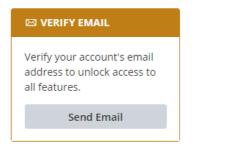
Dbit warden Log in or create a new account to access your secure vault.
Email Address
davew30000@googlemail.com
Master Password
Get master password hint
Remember email
I am human
→ Log In
fit Enterprise Single Sign-On

The new bitwarden vault is presented. This is a suitable time for you to create a browser bookmark for bitwarden's web site.



c. Verify Email

I now go through an email verification exercise. Firstly, I click the 'Send Email' button.



I'll open my email account, where I will have received an email from Bitwarden entitled 'Verify Your Email'.

= 🎽 Gmail	Q Search mail	
- Compose	□• C :	
	🗌 🕁 Ď Bitwarden	Verify Your Email - Verify this email
Inbox 1	🗌 🕁 Ď Bitwarden	Welcome to Bitwarden! - Welcome
★ Starred		

I open the message, then click the 'Verify Email Address Now' link in the email.

Verify Your Email D Inbox ×	
Bitwarden <no-reply@bitwarden.com> to me +</no-reply@bitwarden.com>	
	D bit warden
	Verify this email address for your Bitwarden account by clicking the link below. Verify Email Address Now
	If you did not request to verify a Bitwarden account, you can safely ignore this email.
	♥
▲ Reply ➡ Forward	

d. Final Tasks

A new browser tab will be opened requesting I enter the master password again - I'll close the previous bitwarden browser tab I was using.

Dbit warden Log in or create a new account to access your secure vault.		
Email Address		
davew30000@googlemail.	com	
Master Password		
		0
Get master password hint		
< Remember email		
🕣 Log In	🕑 Create Accour	nt
館 Enterprise S	iingle Sign-On	

I enter the bitwarden master password again, then click the 'Log In' link

ILTERS	0	My Vault	🕸 🔹 🕂 Add Item	🛨 GO PREMIUM
Search Vault 8 All Items ☆ Favorites 1 Trash		There are no items to list.		Upgrade your account to a premium membership and unlock some great additional features.
YPES ⑦ Login □ Card □ Identity				Go Premium ORGANIZATIONS
✓ Secure Note OLDERS No Folder	+			You do not belong to any organizations. Organizations allow you to securely share items with other users.

Once 'My Vault' is displayed, I can be satisfied that I've done the hardest part of the bitwarden setup 🙂

bitwarden Video: 4 (Installing the bitwarden Browser Extension)

Preparation

• Remove the bitwarden browser extension

Chapter 4

To get maximum advantage from bitwarden, it's necessary to install the bitwarden extension into whichever web browser is used.

If you already have passwords being saved by your browser - this needs to be disabled before going any further, as ongoing passwords will be saved into bitwarden. If this method of saving passwords is something which you do, don't worry, your passwords can all be exported from your browser at a later time, and then imported into your bitwarden vault; this will be addressed in Chapter 7. Be reassured, disabling browser password saving from this point forward won't affect any passwords you've previously saved.

a. Disable Saving of Passwords in the Browser

1. I'll start Chrome, then go to settings page by clicking the three dots in the top right corner and selecting **Settings** from the menu that's presented.

I then click on the '**Autofill**' link among the list of settings.

$\leftarrow -$	C O Chrome ch	rome	e://settings
0	Settings	/	
•	You and Google		
Ê	Autofill		_
0	Privacy and security		
۲	Appearance		
Q	Search engine		Dhurana
	Default browser		Chrome across your devices
\bigcirc	On startup		
Adva	nced	•	e
*	Extensions	Z	s
9	About Chrome		

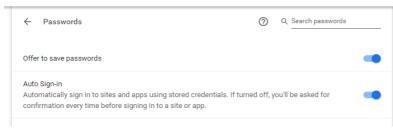
2. I then click on the '**Passwords**' link.



Autofill	
0-7	Passwords
	Payment methods
9	Addresses and more

3. If the '**Offer to save passwords**' and '**Auto Sign-in**' options are enabled, I click the relevant sliders to turn them off

Settings

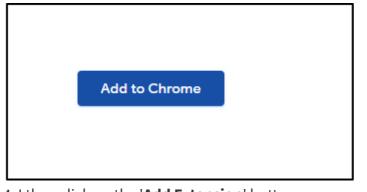


a. Install the bitwarden Extension

1. I go to: chrome.google.com/webstore

🚖 Chrome Web Store - Extensions 🗙 🕂	
← → C	gory/extensions
a chrome web store	
Search the store	
🛧 Extensions	
Themes	
2. I search for the word bitwarden , then click on the t	Mata va
Chrome Web Store - bitwarden × +	√ – □
← → C	ie 🖈 🖪 🛊 🗖 😩
a chrome web store	🔅 Sign i
bitwarden × Extensions	More exte
bitwarden free	
bitwarden free password	Bitwarden - Free Password Manager
bitwarden gratis Ubit warden	 https://bitwarden.com Featured A secure and free password manager for all of your
bitwarden bezplatný bitwar δωρεάν διαχειριστήσ	\star \star \star \star \star 4,293 Productivity
bitwarden מנהל סיסמאות	

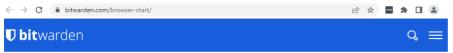
3. I then click the 'Add to Chrome' button



4. I then click on the 'Add Extension' button

Add "Bitwarden - Free Password Manager"?				
It can:				
Read and change all your data on	all websites			
Read and modify data you copy and paste				
	Add extension Cancel			

5. When confirmation of Browser Extension Installed page is presented, I click on the 'Accept All' button



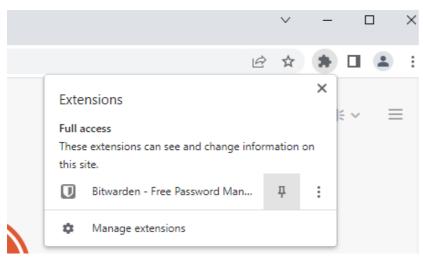
Browser Extension Installed!

Congratulations! You just installed the Bitwarden browser extension. You can watch the short video below to learn how to easily get started using Bitwarden in your browser. If you have any questions or need any further help getting started, feel free to contact us.



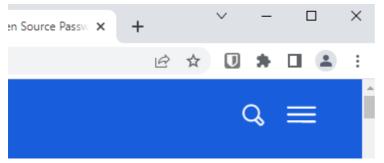
6. To make the bitwarden extension icon remain on the Chrome toolbar, I click on the '**jigsaw piece**' icon in the toolbar

Then I click on the 'pin' button, which is adjacent to the bitwarden description



7. The bitwarden extension icon appears grey in colour, this is because it hasn't been linked to my bitwarden account - yet.

So, I click on the bitwarden extension icon - a login panel is then presented.



8. I then click the 'Log In' link

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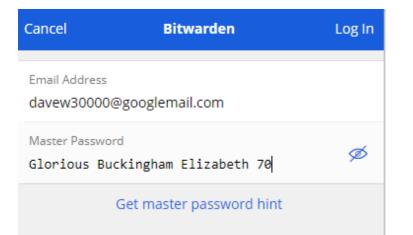
Log in or create a new account to access your secure vault.

Log In

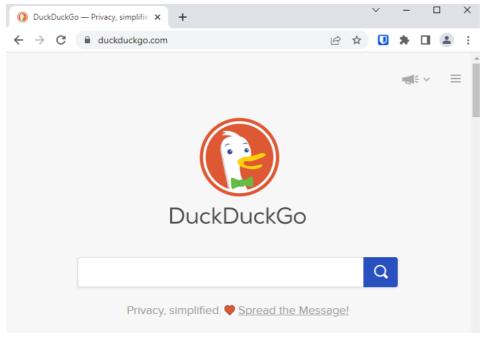
m Enterprise Single Sign-On

Create Account

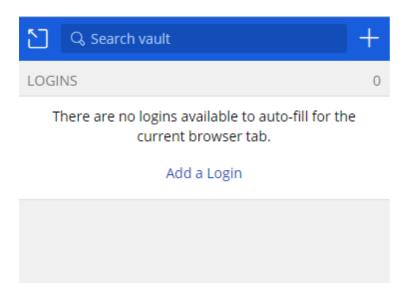
9. I enter the email address and master password, then click the 'Log in' link



10. I can observe that the bitwarden extension icon in the toolbar changed colour to blue - this confirms that it is logged in to my vault



11. In the browser window, the bitwarden password vault is opened - success 🙂





bitwarden Video: 5 (Creating Password Records with the bitwarden Browser

Extension)

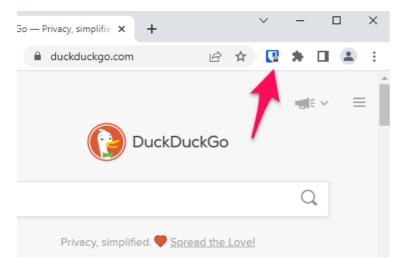
Preparation

- Delete screwfix account from bitwarden
- Log out of screwfix in browser
- Close browser

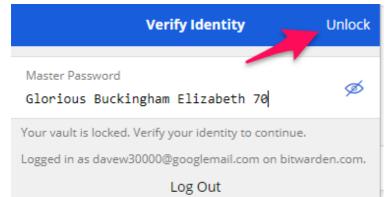
Chapter 5

In this exercise, I'm working on the premise that I've previously established a username and password for screwfix.com - which sells tools and the like. I'll log into screwfix by typing in the credentials in the normal way, and then observe the bitwarden extension dynamically create a new record in bitwarden based upon this information.

a. First of all, I fire up my browser. If the bitwarden icon shows a padlock, it indicates that bitwarden access is locked. Because this is my case here, I'll click on it and log in



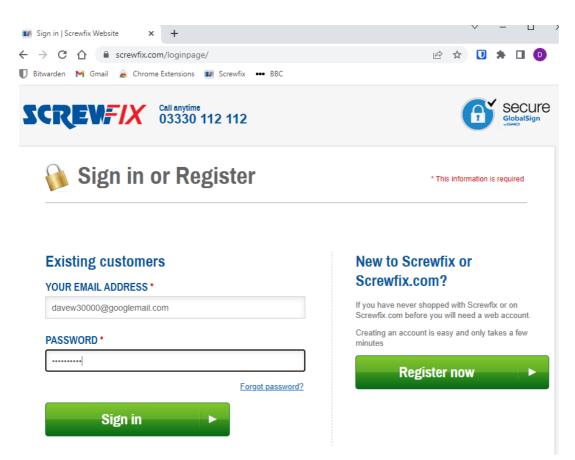
b. I enter the bitwarden master password, then click the '**Unlock**' link, which opens the bitwarden vault panel, and I can see that the padlock has disappeared from the bitwarden extension icon



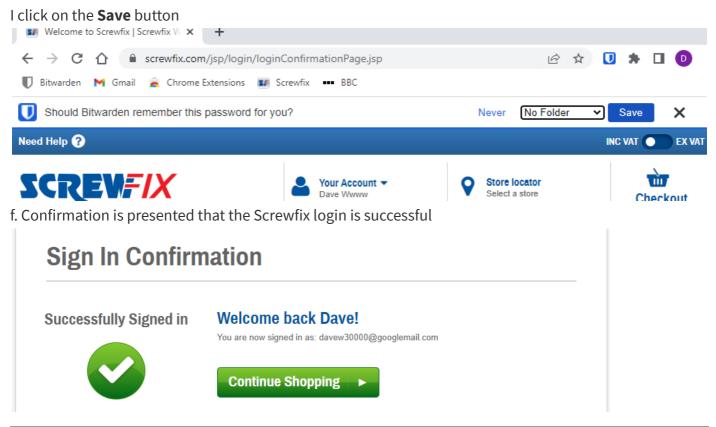
d. I'll now go to the Screwfix web page

I'll next type in my Screwfix email address and password

Clicking the '**Sign In**' button is going to kick the bitwarden extension into life, as bitwarden is monitoring for browser activity of this type.



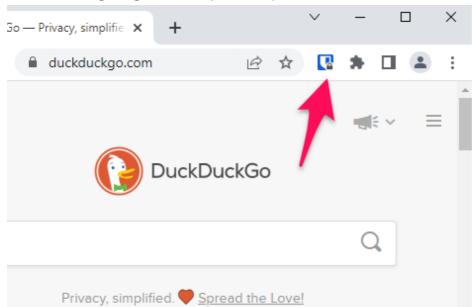
e. A bitwarden message bar appears near the top of the browser window, this is to enable me to request the username and password be saved into bitwarden.



Break

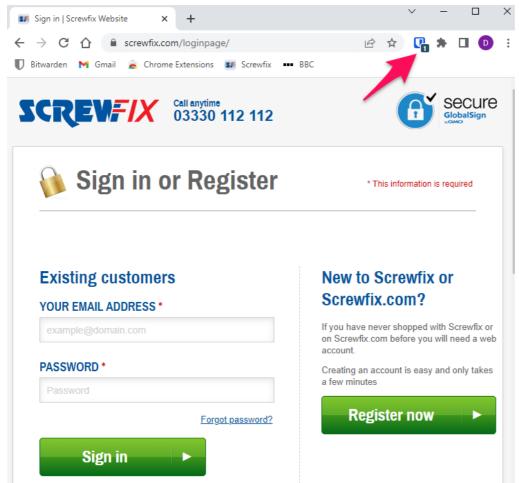
a. I'll demonstrate the Screwfix login experience, now that I have a Screwfix password record saved in my bitwarden vault. To prepare for this demonstration, I'll deliberately log out of the Screwfix web site and then restart my browser.

Because my browser's been restarted, I can see that the padlock is showing against my bitwarden icon, so I need to log in again with my master password.

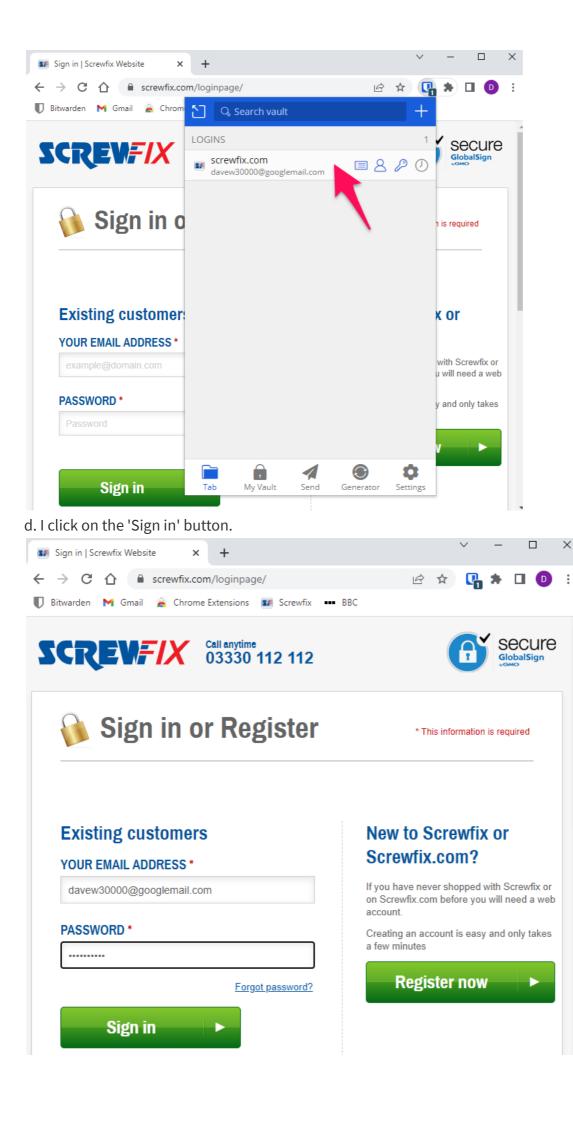


b. I'll now browse to screwfix.com (*click on the Your Account button*). I can immediately see that the bitwarden icon has a number on it - this indicates there's a password record stored in my bitwarden vault for this web site.

I'm now on a page where login credentials are required to be submitted; at this stage I click on the bitwarden icon.



c. A list of password logins recorded in my bitwarden vault for the target web site (Screwfix) is presented. In this case, there is only one suitable record (screwfix.com), so I click on it.



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e. I can see that I am successfully logged on to screwfix.com.



f. Just for your re-assurance, I shall tell you that this was a one-time exercise. Now that bitwarden has created a record for screwfix, future login will be automatic.

I don't need to log into the bitwarden extension again for this automatic login to work, it was only necessary to get the initial setup done. I'll demonstrate this by restarting my browser. The bitwarden extension now has a padlock, evidencing that it's not logged into. I shall now go to screwfix.com - I can see that I'm logged in. This feels like much the same operation which the browser was previously doing this for me, but now the bitwaden extension is now doing it on my behalf.

bitwarden Video: 6 (Creating Password Records with the bitwarden Web Vault)

Preparation

- Delete BBC account on BBC.COM
- Delete BBC account from bitwarden
- Log out of BBC

Chapter 6

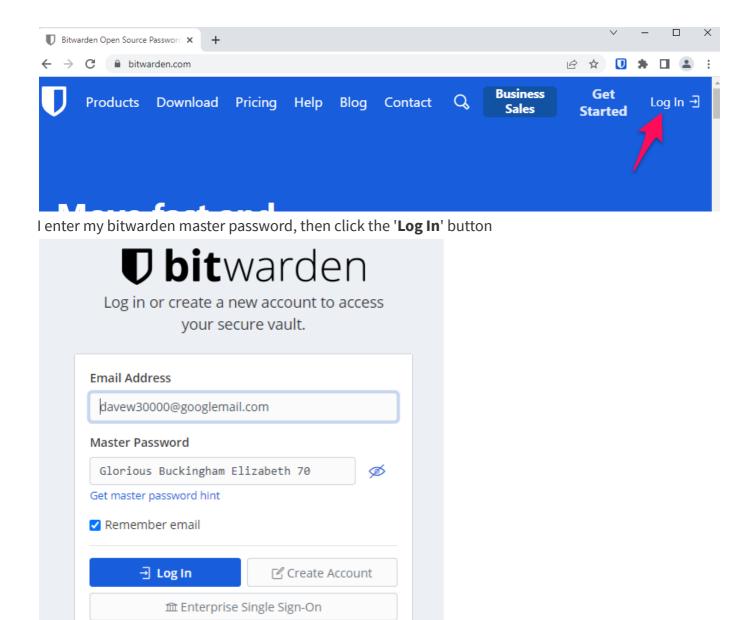
The premise here is that I want to create a brand new account for the BBC's web site. However, I'm going to create the password record in bitwarden first. I'll then use that information when registering (i.e. creating) the account on the BBC web site.

I'll then demonstrate how the bitwarden browser extension seemlessly submits my account information to the BBC web site on an ongoing basis, much like what saved browser passwords would have been doing.

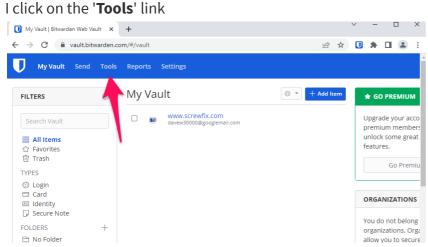
When creating passwords from scratch, I advise use of the bitwarden password generator which is available - you'll see me doing this. This approach may feel a little unusual, as you'll only so much as glance at the passwords which are generated - and they won't need writing down or committing to memory. However, given that we're relying upon bitwarden to store passwords from now on, this makes perfect sense.

This task is done by directly accessing my bitwarden vault with a web browser.

I start my browser and open the **bitwarden.com** web page, then click the 'Log In' link



I observe that my bitwarden vault only contains one entry - the recently created screwfix.com Before going ahead and creating the BBC account, I need to set a default password behaviour when using bitwarden to automatically generate new passwords. By this, I mean defining the type of characters to be used and how long the passwords should be, etc.



I'll leave the majority of settings at their defaults, but ensure that all five of the '**Options**' are selected - as you can see me doing. This means I get all new passwords which are automatically generated by

bitwarden will reflect these characteristics.

TOOLS	Generator		
Generator			
Import Data		cb7%NkwoyFVXAN	
Export Vault	What would you like to gener	ato?	
	 Password O Username 	ate:	
	Password Type		
	● Password ○ Passphrase		
	Length	Minimum Numbers	Minimum Specia
	14	1	1
	Options		
	✓ A-Z ✓ a-z		
	 ✓ a-2 ✓ 0-9 		
	✔ !@#\$%^&* ✔ Avoid Ambiguous Characte	rs	
	Regenerate Password C	opy Password	

When it all looks ship shape, I click on the '**My Vault**' menu item in the top left of the browser, then click on the '**Add Item**' button

My Vault Send	Tools	Reports Settings	
FILTERS	Ø	My Vault	🕸 🔹 🕂 Add Item
Search Vault		WWW.SCrewfix.com davew30000@googlemail.com	
謎 All Items ☆ Favorites 逾 Trash			/
TYPES ⁽³⁾ Login □ Card ^[3] Identity □ Secure Note			
FOLDERS	+		

This is where I'll create the new BBC record

I enter a 'Name' (bitwarden label) for the account - I'll use BBC

I then enter the **'Username'** for the account, which will be davew30000@googlemail.com.

I enter the BBC web site's hostname (bbc.com) in the **URI 1** field. *This is used by bitwarden to associate the credentials being created, with the BBC's web site*

Now we get to the passwords bit

On the right side of the '**Password**' field, I click on the '**Generate**' icon (the circling arrows icon) I next click the '**Eye**' icon to the right of the password, to display the automatically generated password. I'm only doing this step for extra re-assurance, it isn't strictly necessary.

Remember, I don't need to write this password down - the whole point of this exercise is that bitwarden will make this password available when it's next needed. This might be to automatically log you back into the

web site on this computer, or it may be to simply display it in a bitwarden app on a mobile device when you are logging on at a different computer.

I type any '**Notes**' which may be helpful - *Blah blah blah*

Finally, when everything looks how I want it, I click on the '**Save**' button

What type of item is this?			
Login	~		
Name		Folder	\
BBC		No Folder	~
Username		Password	0 ⊘
davew30000@googlemail.com	3	Ykzq2!E3UC4uXc	Ø
Authenticator Key (TOTP)		10) 878 724 🖪 Premium	1
URI 1		Match Detection	
www.bbc.com		Default match detection	• ⊖

\oplus New URI

Notes

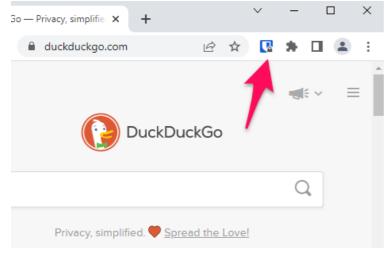
Notes	
Some notes worth making about this BBC account, e.g. I used a DOB of 01.01,2000	ĥ
CUSTOM FIELDS	
New Custom Field	
Text 🗸	
OPTIONS	
□ Masterord re-prompt ⑦	
Save	☆

The new BBC entry in my bitwarden vault can be observed

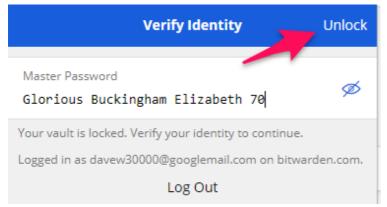
U My Vault Sene	d Tools	Reports	Settings
FILTERS	Ø	My Vau	ult
Search Vault			BBC davew30000@googlemail.com
蹦 All Items ☆ Favorites Trash			WWW.SCrewfix.com davew30000@googlemail.com
TYPES ଟିଧି Login			

I'm now going to demonstrate bitwarden helping to create an account on BBC.com , so here goes...

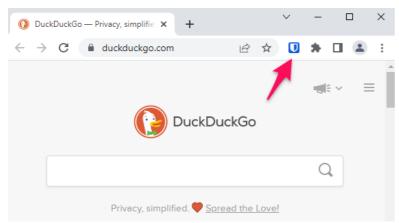
Before proceeding, I want to be sure that I'm logged into the bitwarden extension.



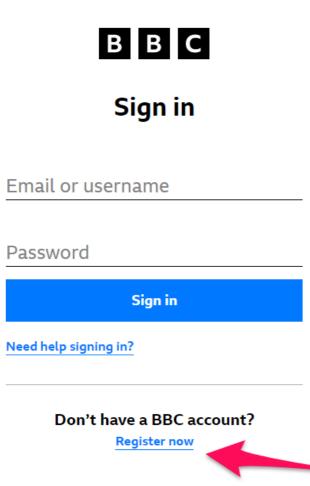
I enter my bitwarden master password, then click the 'Unlock' link



I can observe that the bitwarden icon no longer has a padlock



In the browser, I'll add a **new tab**, then go to the **BBC sign in** page. I don't have an account on the BBC web site yet, so I click on the '**Register now**' link

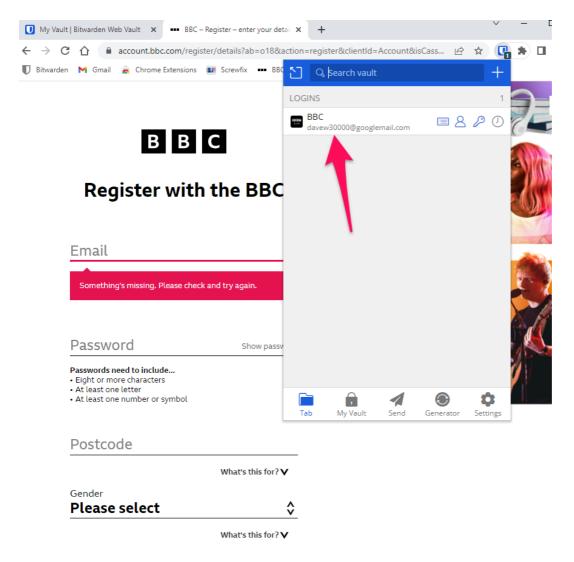


I click through the BBC web site, until I reach the page where account credentials are required to be provided

I can observe that the **bitwarden icon** has a number against it, this indicates that it's detected that my bitwarden vault has an entry containing the BBC web site's address.

I click on the bitwarden icon, the bitwarden vault panel is displayed

I click on the **BBC record** in the bitwarden panel, this copies the username and password into the BBC web page

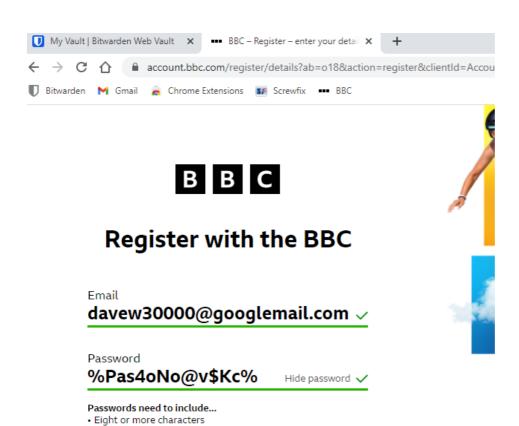


I click on the '**Show password**' link to reassure me that the password field has indeed been populated. Please note, as well as clicking on the BBC record to trigger bitwarden to automatically populate the requisite fields, I could have done the following:

- ' in the BBC record would copy the username into the clipboard, from where I could paste it into the web page
- Clicking the '**key icon**' IN THE BBC record would copy the password into the clipboard, from where I could paste it into the web page

I digressed. I'd previously clicked on the BBC record to trigger bitwarden automatically populating the requisite fields.

When all of the necessary remaining fields on the web page are completed, I click the '**Register**' button



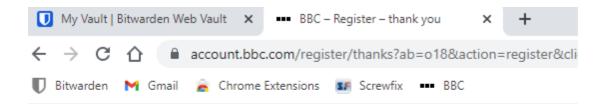
Postcode ST5 3SB What's this for? V Gender Male What's this for? V What's this for? V By clicking Register, you accept our Terms of Use. Find out about our Privacy and Cookies Policy.

At least one letter

• At least one number or symbol

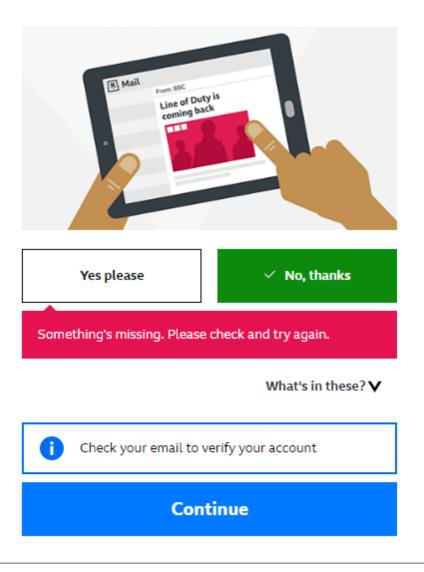
Register

I click the 'Continue' button, and there follows a confirmation that the BBC account is signed in.



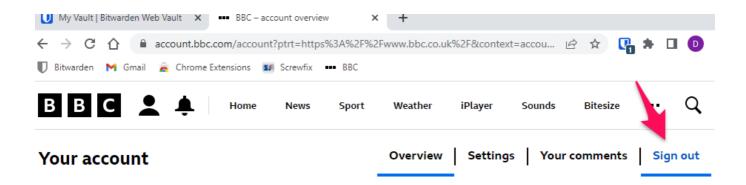


OK you're signed in. Now, want to keep up to date?



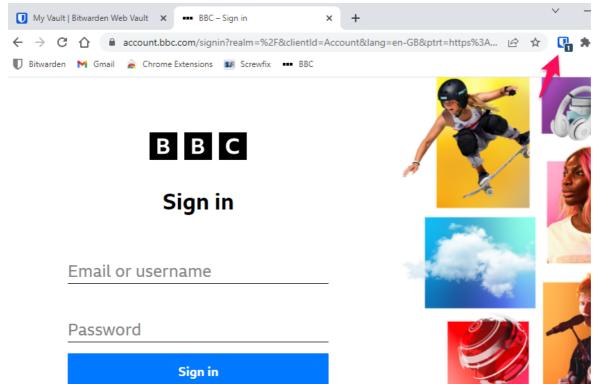
For the final exercise in this chapter, I'll demonstrate how bitwarden seamlessly logs me onto the web site on an ongoing basis.

To prepare for this final exercise, I click the '**Sign out'** link and close the browser.

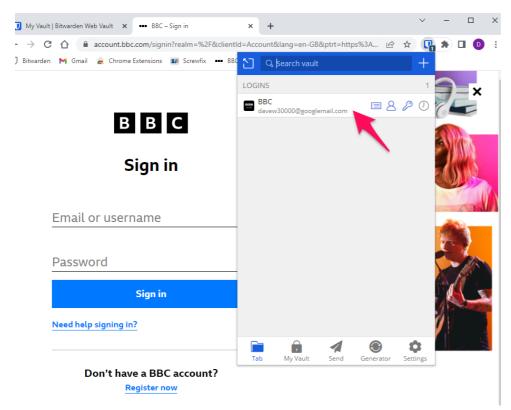


I open the browser again and sign into to the **bitwarden extension**.

I return to the **BBC log in** page, and observe that the bitwarden icon has a number displayed on it.



I click on the **bitwarden icon**, then click on the **BBC entry** which is presented.



The BBC credentials are automatically populated into the relevant fields I finally click on the '**Sign in**' button to finish







I can observe that the BBC web site is logged in

This is the last time you need to engage with bitwarden to log you into the BBC web site. From this point forward, bitwarden will automagically perform the credential submission on your behalf, until such time that you log out of from the BBC web page.

I'll quickly demonstrate this by closing the browser, opening it again, then going to the BBC's web site. I can see that I'm still logged in :-)

bitwarden Video: 7 (Export & Import of Browser Passwords)

Preparation

- Make sure there's no papajohn or argos logins in bitwarden
- Chrome must be set to not save creds

Chapter 7

Intro

For this demonstration, I'll be exporting passwords for the web sites of Argos (a catalogue shop) and Papa John's (takeaway pizza), which were previously saved into my browser.

The **Chrome** password export process generates a **Comma Separated Variable** file - what is referred to more simply as a **CSV file**. You can think of a CSV file as being akin to a spreadsheet.

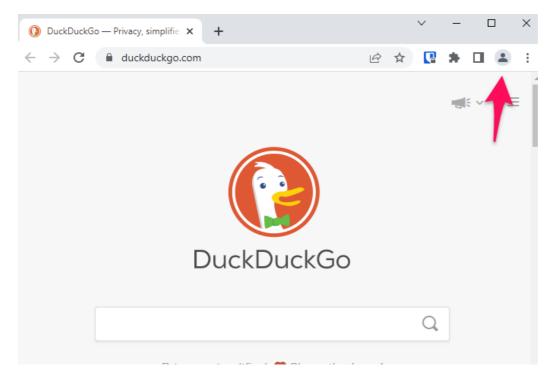
I'll now show you a previously created CSV file, so that you'll understand better what I'm talking about. *Open the Chrome Passwords file in Excel.*

Once Chrome has generated the CSV file, I'll save it onto my Windows desktop, which will suffice for the purpose of this demo. While Chrome is used for this demonstration, all browsers actually have a similar export functionality. The file demonstrates that you can see that all of the passwords are unencrypted. Also, you should do the bitwarden import process straight after doing the Chrome export. Once the import is completed, it's essential to immediately delete the CSV file used. If you're doing this on Windows, be sure to empty your Recycle bin straight afterwards.

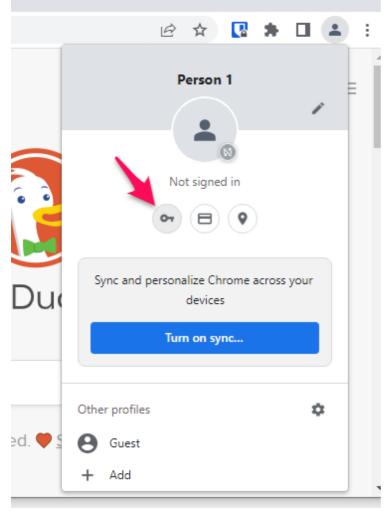
You must only go through this export / import process once you've become reasonably familiar with bitwarden.

Export

a. To start the export process in Chrome, I click on the **user icon** in the top right of the browser.



b. I then click on the icon representing a **key** - the one to the left of the three encircled icons



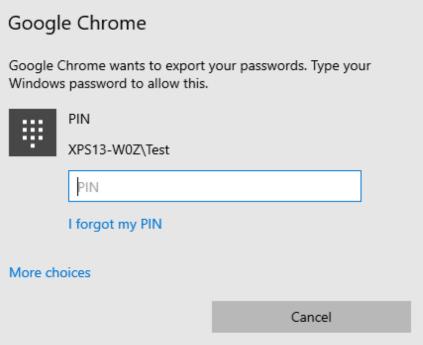
c. I scroll down to the Saved Passwords section, then click on the corresponding three dots

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d. I click on the 'Export passwords' button

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			• ·	ops up, I click the ' Export p arts of the stored credentials. If turned of								
it a: JT	Expo	rt pa	sswords	to anyone who can see the expo				l				
				Cancel	port p	oassword	3					

f. If I'm prompted to enter login credentials for my Windows system, I then do so...



g. I then need to choose a location to save the CSV file. For this demonstration I'll save it to my desktop. Remember, this file will contain unencrypted passwords, so I must only save it to a location where I know I can quickly find it and delete it once the bitwarden import process has been completed.

Save As					×
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> OneDrive Name	Date modified	Туре	Size		
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> 🧊 3D Objects					
> 🔜 Desktop					
> 🚔 Documents					
> 🕂 Downloads					
> h Music					
> Pictures					
> 📓 Videos > 🏰 System (C:)					
> CD Drive (D:)					
> 💣 Network 🗸					
File name: Chrome Passwords.csv					~
Save as type: Microsoft Excel Comma Separated Values File (*.csv)					~
∧ Hide Folders			<u>S</u> ave	Cancel	

h. Open the CSV file. Here's a cheat look inside the CSV file, it can be seen that all the account

information is insecurely stored. Close the Excel file

/	A	В	C	D
1	name	url	username	password
2	www.argos.co.uk	https://www.argos.co.uk/account/login	davew30000@googlemail.com	KEIScdfe7752#
3	www.papajohns.co.uk	https://www.papajohns.co.uk/register.aspx	davew30000@googlemail.com	KEIScdfe7752#
1				

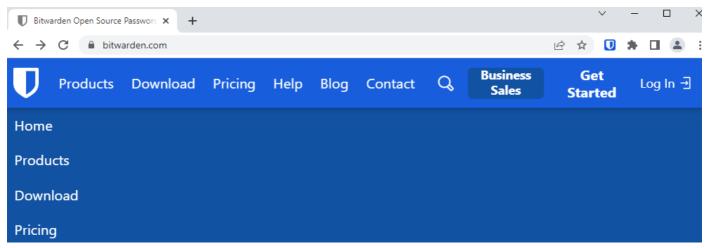
Import

Now onto the import...

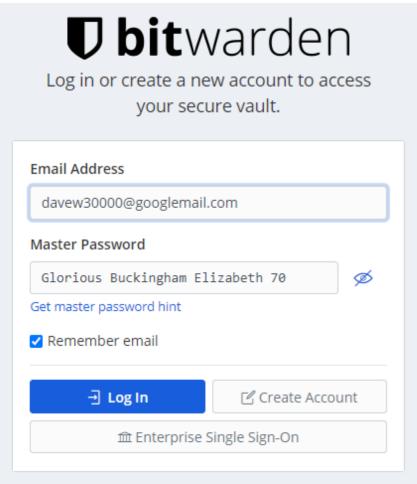
The import of the CSV file must be done in a browser logged on directly to your **bitwarden.com web**

vault, i.e. not in the bitwarden extension

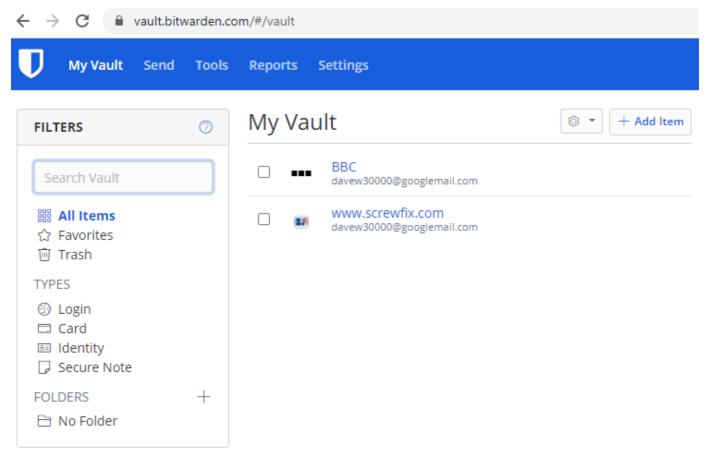
a. I'll switch to Chrome, go to **bitwarden.com**, then click on the '**Log In**' link



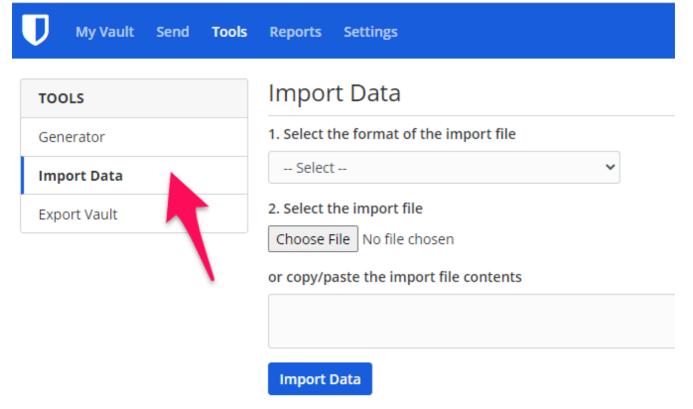
b. I'll enter the master password, then click the '**Log In**' button



c. The bitwarden vault displays the two existing password entries for BBC and Screwfix

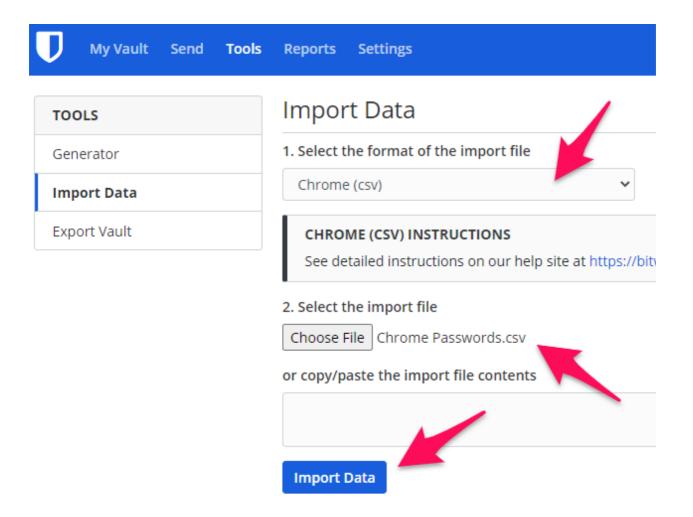


d. Click on the '**Tools**' menu Then click on the '**Import Data**' link



e. Change the format type to **Chrome (CSV)**, then browse to the **Chrome Passwords.csv** file previously generated.

Finally, click on the 'Import Data' button



f. I can observe that the imported records appear in my bitwarden vault.

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000	All Items Favorites				www.argos.co.uk davew30000@googlemail.com		unlock some great additional features.
1 TYPI	Trash FS				www.papajohns.co.uk davew30000@googlemail.com		Go Premium
6	Login				WWW.SCrewfix.com davew30000@googlemail.com		
	Card Identity				asterisocoe8008.email.com		ORGANIZATIONS (?)
P	Secure Note						You do not belong to any
FOL	DERS		+				organizations. Organizations
l Pi	No Folder						allow you to securely share

g. These password records can now be leveraged when logging on to **argos** and **papajohn's** the next time. This would be similar to what I demonstrated in **Chapter 6**, when logging on to the **Screwfix** web site.

bitwarden Video: 8 (bitwarden on Mobile Devices)

Preparation

- Delete bitwarden app
- Log out of BBC News

Chapter 8

Part 1 is Installing the bitwarden app onto my mobile device

- On my mobile phone, I open the **Play Store** app
- I then search for bitwarden
- I click on the Install button, and can see the icon appear

Part 2 is Logging into the bitwarden app for the first time

- I click on the bitwarden app to open it
- I next click the 'Log in' button
- I next type in the email address
- Then I type in the master password there's no magic I can use to speed up these steps
- Once the credentials have been entered, I click the 'Log in' button
- Before I'm finished, I want to enable biometrics login meaning using my thumbprint to log in
- I click on the **Settings** button, then click to enable 'unlock with biometrics' I could also have set a PIN code for this purpose
- I now close the bitwarden app before the next demo

Part 3 is Using the bitwarden app to log into an app

- I'll now open bitwarden, this time I'm demonstrating using a thumbprint (i.e. **biometrics**) to perform the login
- I'm now open my **BBC News** app
- I click on the **Sign in** icon
- I use app switching to paste the user account and password
- I click Sign in, and can see that I'm successfully logged into the BBC News app
- I'll now close both the bitwarden and BBC News apps
- I'll open the BBC News app again
- You can see that I'm still logged in