The Essential Guide to Online Safety



This short course will give you a few tips on how to stay safe online





This is serious



ONS:

"Fraud is now the most common crime in England and Wales. It costs the UK £137bn a year..."

"There were 4.5 million reported offences of Identity Theft in 2022"

National Crime Agency:

"...we think that fewer than 20 per cent of incidents of fraud are actually reported"

House of Commons Justice Committee:

"Just 2 per cent of police funding is dedicated to combating fraud despite it making up

40 per cent of reported crimes in England and Wales. More than half of all fraud

is believed to be carried out over the internet"



Victims Commissioner:

"4.6 million people are affected by fraud each year and around 700,000 will go on to suffer profoundly"



"There is an 86% year-on-year increase in online fraud"



"Kent Police received **12,000 reports** of fraud from Action Fraud in 2022. This resulted in **20 prosecutions**"



The Essential Guide to Online Safety



Nationwide

https://payments.ebay.co.uk/w

https://twitter.com/safety/

Google

Subjects we will cover are:

Passwords

Internet Banking

Phishing

Forged Websites

Genuine websites

Using Money Online

Secure Websites

Logging Out

Email Scams

Security Software









An Income Tax repayment is a refund of tax that you** e overpaid. So, if you'ke paid too much tax for example through your job or pension this ye

You all get the repayment by bank transfer directly to your credit or debit card.





You will have passwords for everything

(Bank accounts, Amazon, Social Media, PayPal, email etc)



You can recall it exactly No-one else can guess it





Weak passwords:

letmein, 0000, password, 123456

Lower case (small letters) only No mix of numbers & letters Few characters Easy to guess







Strong password:

LondoN2018, 19Evelyn82

Mix of lower & upper case <u>and</u> a few numbers More characters. Still easy to remember

Tp4ZrT5q1i9s3z5c2iD

Great password but difficult to remember!

Even stronger passwords:

Use 'odd' character from the keyboard –

! " £ \$ % ^ & * € and so on.

These dramatically improve password strength

Good Passwords – that you remember:

Use an acronym that means something to you. Example:

My daughter's birth date is 13 April 1982

Can become: Md'sbd13April82

or

Use three (or more) words. Example:

Fruitbowl.Wardrobe.Printer

Don't use:

Something that could easily be guessed

(Own / partners / child's / grandchild's name/ favourite football team, street where you live, pet's name etc)

Do use:

Something that could **NOT** be easily guessed:

(Mother's place of birth, partner's middle name, father's first name)

Consider:

A Password Manager. 'Lastpass'; 'Dashlane'; 'Roboform' etc (Search for 'password manager')

Good to use different passwords for different places – but difficult to remember them all

Use a few passwords

Use more complex passwords for important websites

(It won't matter if your utility company and the site you use for sending e-cards have the same password.)

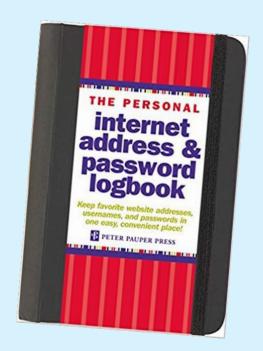
The National Cyber recommend that you do NOT change your password regularly

(Only change it if you think it's been compromised)



If you write them down, don't make it obvious!

Write them in a way (and in a place) that no-one will understand what they are



Don't forget your mobile phone!

Most are purchased with no password set

(Use fingerprint / facial recognition if available)







Whatever password you choose, check out how good it is at passwordmonster.com

A password based on your grandson's name and birth year doesn't take long to break

Passwords

How Secure is Your Password?





© Andrew Gadd



Internet Banking









© Andrew Gadd



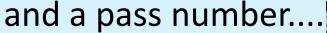
Bank Accounts



Have excellent security

Banks give an online guarantee

To access your online account you'll need a variety of details: Customer number, Date of Birth, a one-time-code



(Two Factor Authentication)

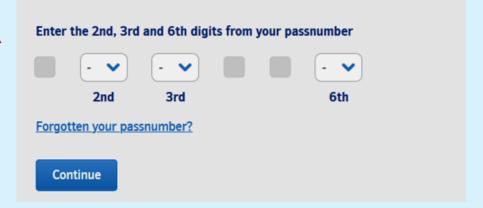


Bank Accounts

The pass number

You have to enter parts of it. Perhaps the 2nd, 3rd & 6th numbers

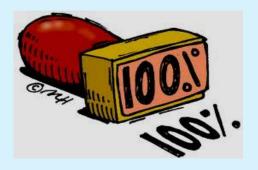
(Tomorrow it will be the 2nd, 1st & 5th)



Bank Accounts



Bank security is probably perfect



So - how are you tricked into letting them in?

You might be sent a **phishing** email like this:





Dear Customer,

Your account has been placed on restricted status. Restricted accounts continue to receive payments, but they are limited in their ability to send or withdraw funds.

To lift this restriction, you need to confirm your identity. All restricted accounts have their billing information unconfirmed. To initiate the confirmation process, Click Here

Or one like this:

Dear Western Union valued customer,

You received this email as a notice for the database update for this month. This update is designed by our IT engineers to provide higher security to our customers online accounts, prevent unauthorized account access and other types of online fraud.

You are required to update your online profile by clicking on the following link:

Click here to access your online profile

Please note that this a one-time task that will take only 3-5 minutes of your precious time. However, failure in updating your profile will result in limiting your account access. We appologize for any inconvenience.

Thank you, Jeremy M. Scott, IT Assistant, Western Union.

Or like this:

<u>PayPal</u>

Because it has expired, your credit card has been removed from your PayPal account.

If this was the only credit card on your PayPal account, you will need to add a new card to continue sending instant PayPal payments.

To add a new debit or credit card, log in to your PayPal account at www.paypal.co.uk, go to your Profile, and click My money.

Yours sincerely, PayPal Direct

PROTECT YOUR PASSWORD

NEVER give your password to anyone, including PayPal employees. Protect yourself against fraudulent websites by opening a new web browser (e.g. Internet Explorer or Firefox) and typing in the PayPal URL every time you log in to your account.

They invite you to click on the web-links

Click here to access your online profile

To initiate the confirmation process, Click Here

To add a new debit or credit card, log in to your PayPal account at www.paypal.co.uk, go to your Profile, and click My money.

Never click on these links!

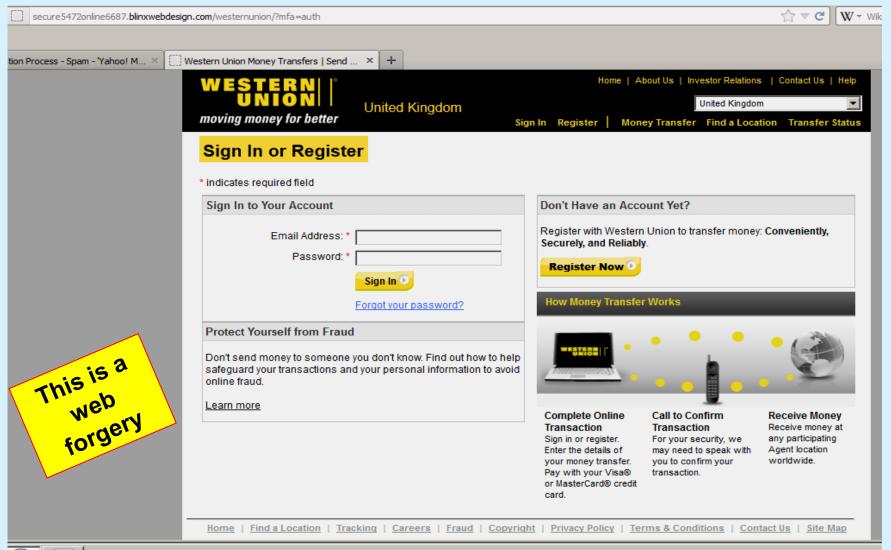
If you did click on the **paypal** link – you'd arrive here:



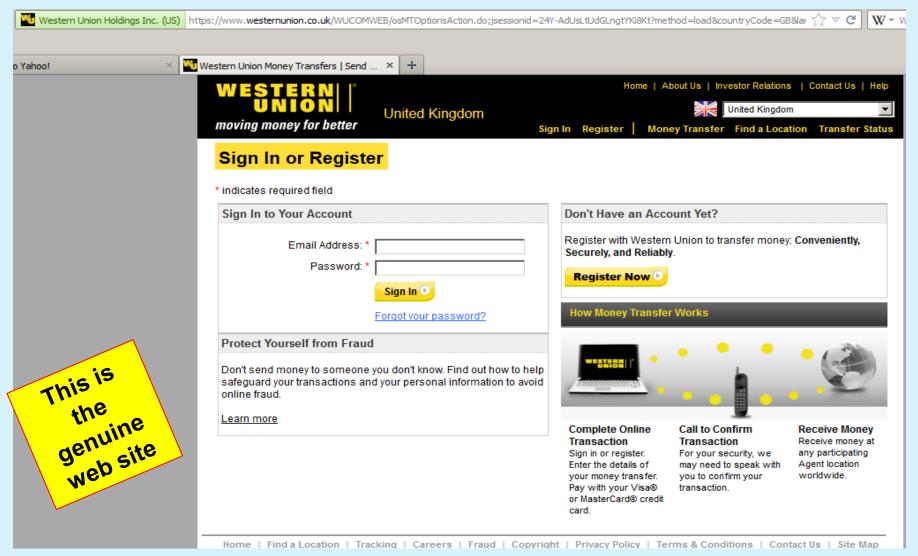
But you thought you were here

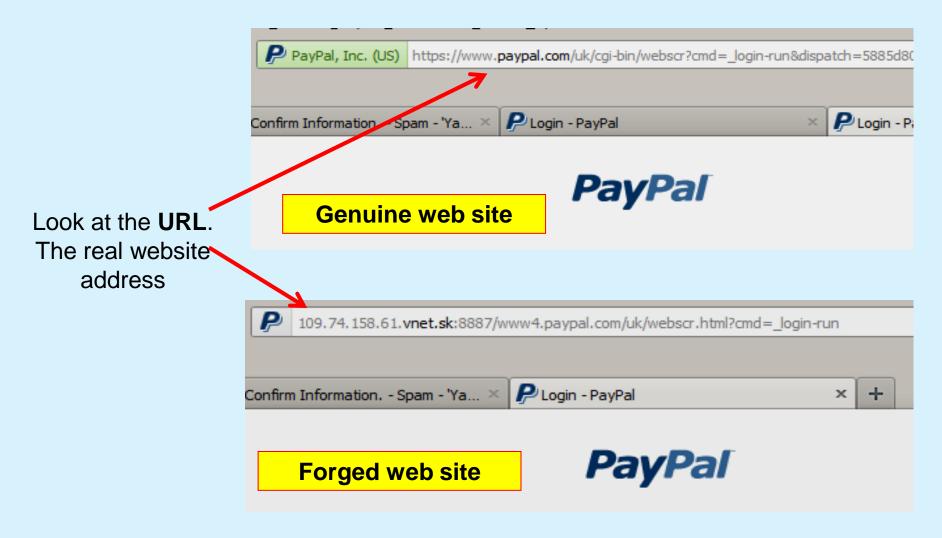


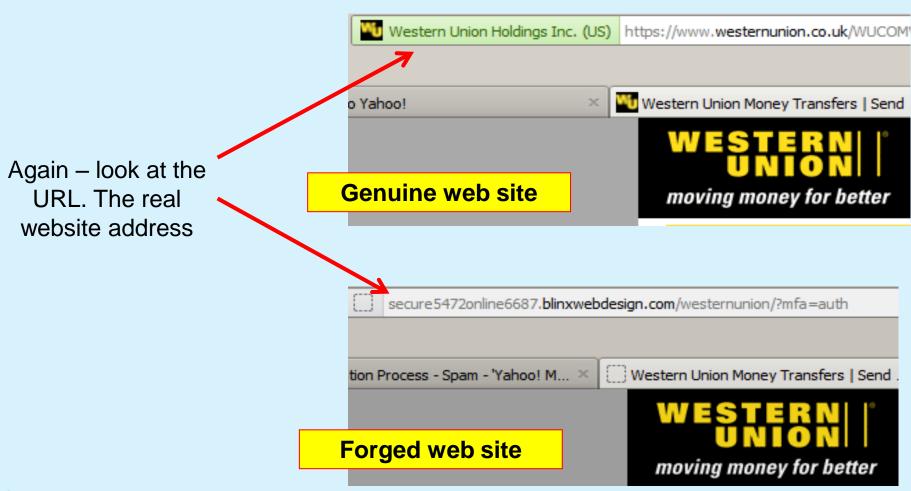
If you click on the **Western Union** link, you are taken here



But you thought you were here







But **before** you click...

Place your mouse over the link... But **don't** click

Look at the bottom of the browser

This is the web address you will be taken to

Security Improvement

From: "Barclays Online" <support@barclays.com> 📆

To: undisclosed-recipients

Dear Barclays valued customer,

You received this email as a notice for the database update for this month. This update is designed by our IT engineers to provide higher security to our customers online accounts, prevent unauthorized account access and other types of online fraud.

You are required to update your online profile by clicking on the following

1

Click here to access your online profile

Please note that this a one-time task that will take only 3-5 minutes of your precious time. However, failure in updating your profile will result in limiting your account access. We appologize for any inconvenience.

http://secure1587olb4088.bnpctg.org/?auth=secure



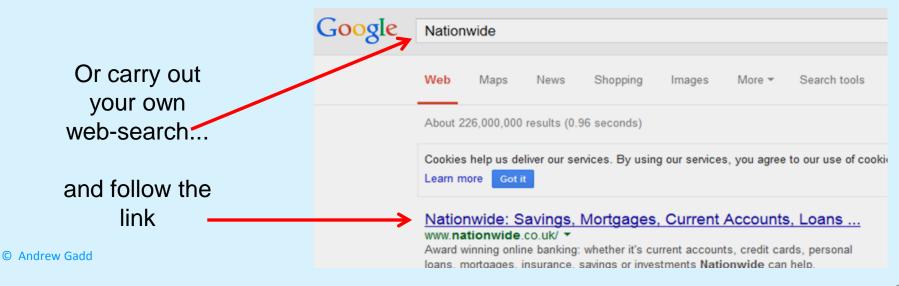


Obviously not Barclays Online

© Andrew Gadd

It is safest to type in the web address yourself





'Pretend' Websites via Google



© Andrew Gadd

If you buy pharmaceuticals online, make sure you use a

Registered Pharmacy



They will have a **Green Cross** and their registration number









- Regulated by the CQC
- GPhC NHS pharmacy
- ✓ British GMC doctors



Check their validation on:

pharmacyregulation.org

When you want to buy something on-line or enter any personal details, make sure the website address starts with http**S**



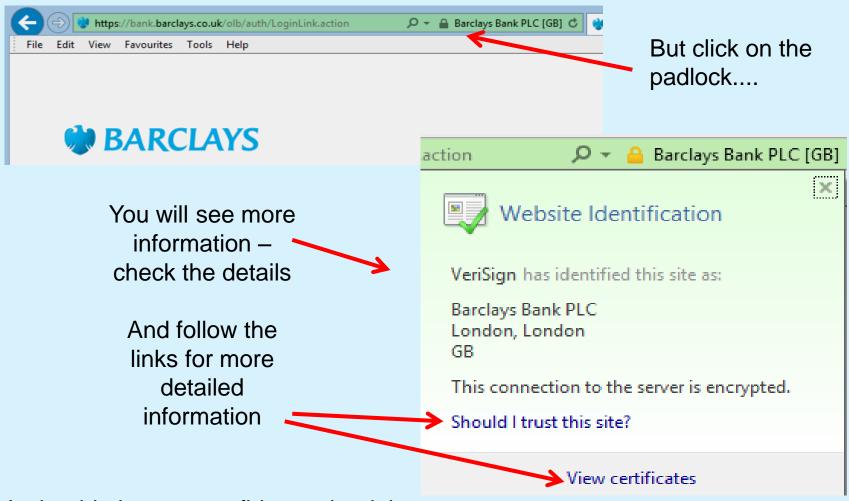
This means it is a **secure site** – and no-one can intercept your details

But, although https means your data cannot be intercepted – it doesn't mean it is a trustworthy site.

https://payments.ebay.co.uk/w
https://www.westernunion.co.uk/W

Even the small green padlock is not a guarantee that the site is trustworthy





It should give you confidence that it is a genuine site

Use a credit card instead of a debit card if you can. Seller won't know your bank details and the card company will have a method of dispute resolution

For an extra layer of security:

Sign up to an online payment platform:

PayPal / Apple Pay / Google Pay

Use it to pay the supplier, if it's an option

















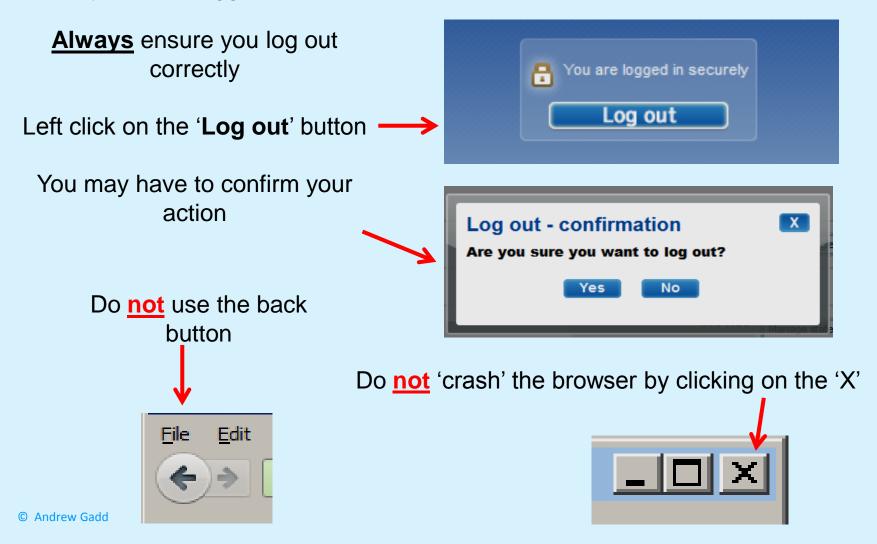


It puts a trustworthy agent between you and the supplier

They all have a dispute resolution centre

Logging Out

If you have logged into a secure website



Public Wifi



Public internet access is inherently unsafe

You and the (potential) hacker are inside the same firewall



If you use public WiFi, <u>never</u> do anything confidential or use a debit or credit card







We've all heard of service providers being hacked.

Maybe your data was stolen...

eBay hack 'one of the biggest data breaches in history'

Equifax Data: one of the worst security breaches in history

TalkTalk given record fine over data breach that led to data theft of nearly 157,000 customers

The personal data of 156,959 customers including names, addresses, dates of birth, phone numbers were stolen



British Airways has settled a legal claim by some of the 420,000 people affected by a major 2018 data breach.

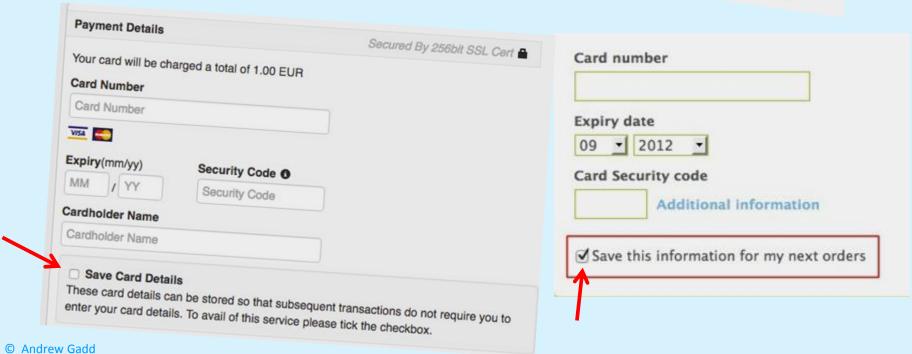
The breach affected both customers and BA staff and included names, addresses, and payment-card details.

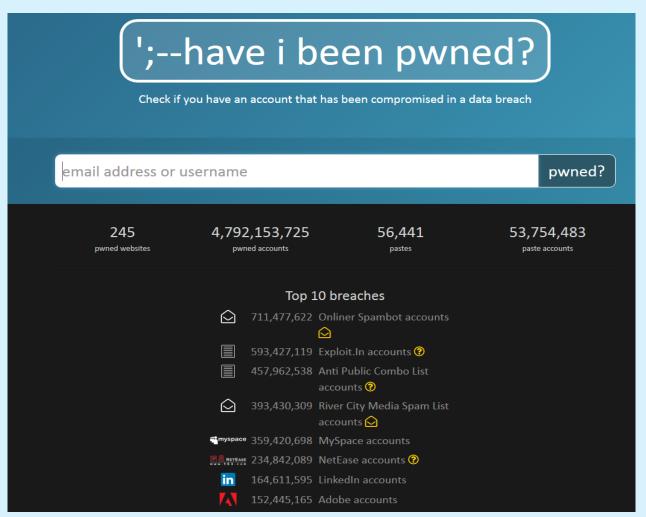
The Information Commissioner's Office handed BA its largest fine to date, of £20m, over the "unacceptable" failure to protect customers.

Facebook Security Breach Exposes Accounts of 50 Million Users

It is not quite as convenient, if you don't allow the provider to store your card details, you'll be a little less exposed Make sure the 'Save' boxes are not ticked. GDPR rules say you have to 'opt-in' but always check







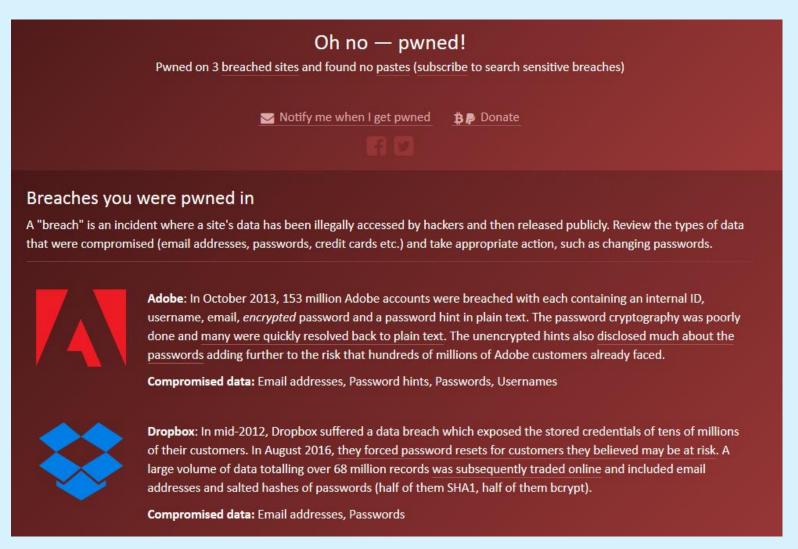
Visit haveibeenpwned.com

Enter your email address into the box and click on 'pwned?'



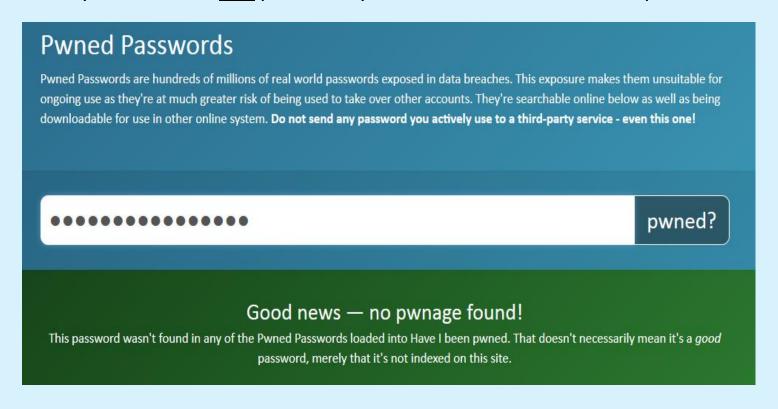
And hope you don't see this message!

If you do, you need to change your password!



haveibeenpwned.com

On the same site, you can see if **any** password you use has been found on a pwned site



This does <u>not</u> tell you if a password is any good. Just if it's been found in a data breach.

This sort of email is 20+ years old, but the scammers still send them out

To: undisclosed-recipients

My Beloved I am Mrs. Anizar Hussan a citizen of Oman but currently residing in the United Kingdom.I have a business proposal for you worth US\$40.8Million.Please if you are interested contact me through aniza.hussan0108@hotmail.com so that we can discuss more about the business.

Remain blessed,
Mrs. Anizar Hussan

It is obviously a scam. (\$40million!) So, why do they keep sending them out?

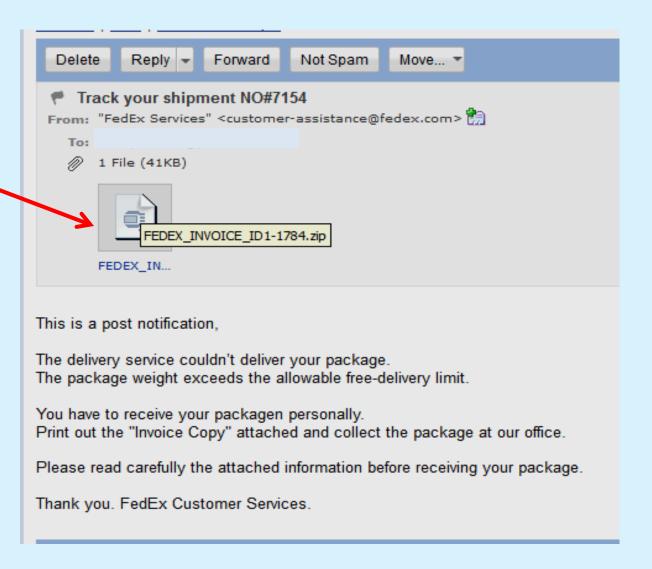
Do <u>**NOT**</u> respond.

If you reply, you confirm your email address – and it will be sold to others

It is estimated that 72% of all email is Spam

NEVER open strange attachments

It will undoubtedly infect your device with a virus



Some Spam emails are almost believable

It has the HMRC logo

It is offering a tax refund of (only) £364.77

BUT:

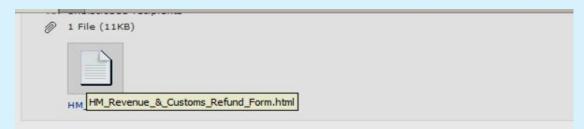
It's not addressed to you
It uses the wrong characters —
The sender did not have a '£' on
their keyboard — which makes it
very suspicious

This is a spam email

Downloading the

attachment would infect

attachment would infect





Dear Applicant

An Income Tax repayment is a refund of tax that you* e overpaid.

So, if you米e paid too much tax for example through your job or pension this year or in previous years HMRC will send you a repayment.

You猛l get the repayment by bank transfer directly to your credit or debit card.

After the last annual calculations of your fiscal activity we have determined that you are eligible to riceive a tax refund of 364.77 GBP.

Due to the high volume of remains due you must complete the online application

In oder to process your refund you will need to complete the application form attached to this email. Your refund may take up to 3 - 5 days to process please make sure you complete the form correctly.

Download attachment to access the form for your tax refund.

Best Regards, HM Revenue & Customs London, HA7 2LD

The 'scammers' are getting better all the time

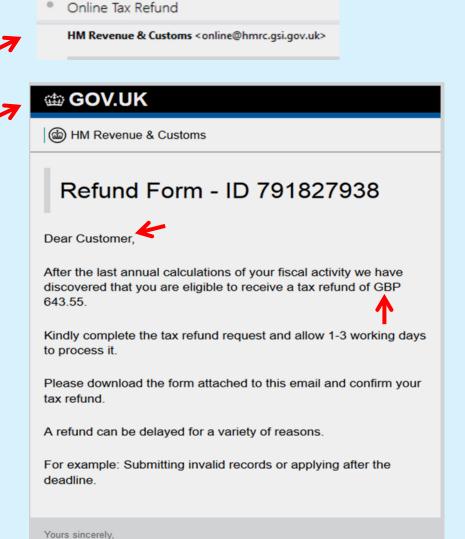
It has a genuine looking email address

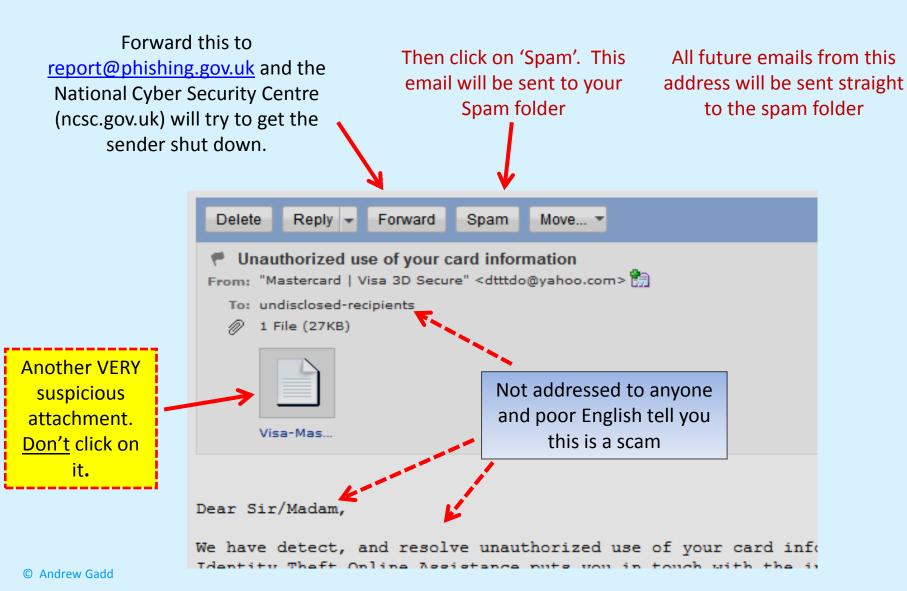
Correct logo

No spelling or grammar mistakes

A believable £643.55

BUT: Not addressed to you & no '£' sign





Email is Not Secure

Why does your bank never email your statement to you?

Because email is not secure

You might log-on to an https website, but the email will be forwarded on to many computers during it's journey

It *travels in plain text* over the network and will be *stored in plain text on* email servers

Think of your email as a postcard!

For a secure email, search for: Proton Mail, Startmail, Tutanota, Zohomail or Thexyz



https://mail.google.com/

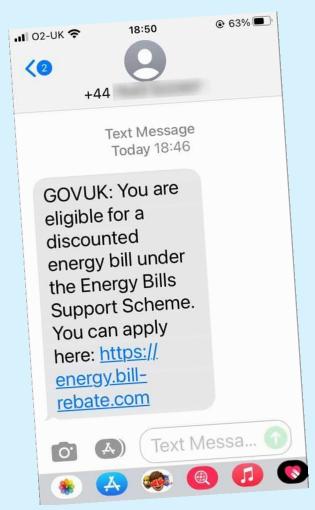
https://mail.yahoo.com/

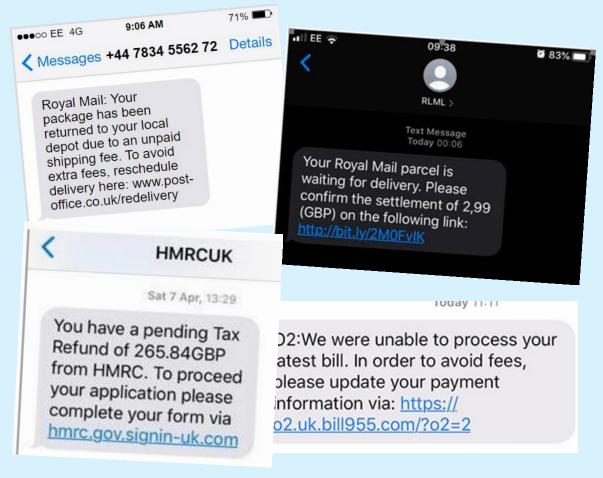
Some are surprised to learn that Google and others scan your emails for keywords to show more personalised adverts



Text Scams

If you receive a phishing / scam text, <u>NEVER</u> respond. Forward them 7726 and the National Cyber Security Centre will get the sender shut down.





And they are getting better all the time.....

Email Scams



@calendavr.com

@getspora.com

@infor.cirnas.com

@skyNet.thayaelu.com

@infor.agencebe.com

Constantly evolving scams, exploiting every opportunity





Coronavirus-related frauds increase by 400% in March

HEAD TOPICS UNITED KINGDOM



Ukraine war: Investigation finds hundreds of fake charity websites



52

Security Software

An anti-virus program is <u>essential</u>

There are many to choose from

Some cost money...











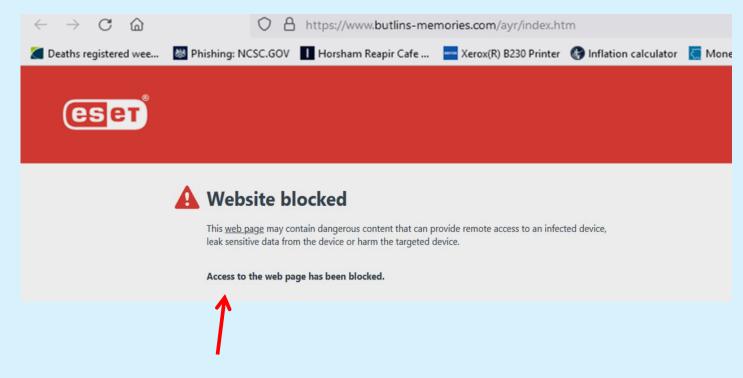




Security Software

When a spam email asks you to visit a website OR you download an unknown attachment

If you try to visit a website that has 'dangerous content'....



Hopefully your anti-virus program will stop it

Note the website is a very innocent sounding <u>butlins-memories.com</u>

Security Software

Some are **free** for domestic use





In my opinion, either of these <u>free</u> programs are probably adequate for domestic use.

But you will see various 'pop-ups' encouraging you to upgrade to a paid version

Software Updates

It is vital to keep your software up to date.

Most updates fix security flaws

Windows Update



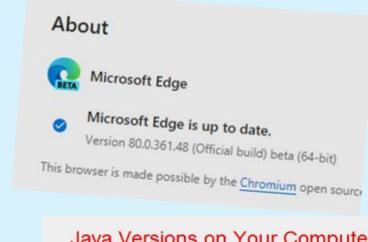
You're up to date Last checked: Yesterday, 21:10

Check for updates

Change active hours







Java Versions on Your Computer



Congratulations!

You have the recommended Java installed Version 8 Update 40

No out-of-date versions of Java were found

Return to the Java.com home page

Security for Mobiles

Beware of fake downloads...

Be careful of what you download even from the official app store



It might look like the genuine 'app' but many crooks create fake apps that look like the real thing



Ideally, go to the **vendors website** and follow the link to the app store

Strongly suggest you install some security software on your mobile







According to the Surrey Police...

Did you know?

of burglars use social media to target properties*

Social Media Safety

Use extra precautions when using social media on mobile devices

<u>Don't:</u>

Tweet photos from inside your home

Mention your address on any social network

Announce when you're going on holiday

'Check-in' at airports or holiday destinations on social channels

Post your holiday pictures whilst on holiday

Post photos of new expensive items you've bought or received

Assume the safety settings of your social profiles are where you left them

Backups

What would happen if your device died or was stolen?

What if your data was encrypted by a hacker?

It depends on your device...

Use online storage

Use an external drive for a lot of data

Use a USB 'Flash Drive' for less data



USB 3.0 Flash Drive

SanDisk Ultra 100MB/s USB 3.0 Flash

Drive - 128GB

★★★★★ (252)



Create free account See plans and pricing

Iready have OneDrive? Sign in >

Your stuff, anywhere

Email

Password

I agree to Dropbox terms.

Sign up

or Sign in

A backup copy of your data might 'save the day'!



The Essential Guide to On-line Safety





For further study, the following websites are recommended:



actionfraud.police.uk
cyberaware.gov.uk
getsafeonline.org
thinkuknow.co.uk
thinkjessica.com
bbc.co.uk/webwise
welivesecurity.com
takefive-stopfraud.org.uk
ncsc.gov.uk
disney.co.uk/internet-safety













Don't forget your bank or building society will have their own security pages!



The Essential Guide to Online Safety





I hope this presentation has been useful



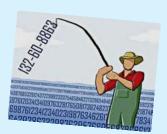


Any feedback (good or bad) is gratefully received at:

presentationfeedback2023@gmail.com

Thank you in advance!"

https://payments.ebay.co.uk/w



Time to crack your password: 29 million years





An income Tax repayment is a refund of tax that you'ke overpaid.

So, if you'ke paid too much tax for example through your job or pension this ye

HMRC will send you a repayment.

You'ke get the repayment by bank transfer directly to your and fine

