
CYBER - SECURITY

PART 2

Keeping you safe in an electronic age

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HOW DO I PROTECT MYSELF – 2

ALL ABOUT PASSWORDS

- Change your passwords regularly. Do not use family names.
- Where do you keep your list of Logon IDs and passwords. In a little note-pad?
- Where do you keep the note-pad – it is possibly your most valuable possession!
- “But I disguise my password and PINS in the book by making them look like phone numbers”
- Guess what – the baddies know that; your phone numbers might just help them to speed up the computed hacking automated search!.....see shortly.





Passwords are the front door keys to our personal Information.

- Deception – Tricking you into revealing it
- Brute Force – An automated way to crack it
- Spyware – Recording your login
- Shoulder Surfing – Watching you do it

Passwords



Together reducing harm



Password security

Attackers use a variety of techniques to discover passwords, including using powerful tools freely available on the internet. The following advice makes password security easier for your users – improving your system security as a result.

How passwords are cracked...

Interception

Passwords can be intercepted as they are transmitted over a network.



Brute Force

Automated guessing of billions of passwords until the correct one is found.



Stealing Passwords

Insecurely stored passwords can be stolen – this includes handwritten passwords hidden close to a device.



Searching

IT infrastructure can be searched for electronically stored password information.



Manual Guessing

Personal information, such as name and date of birth can be used to guess common passwords.

Shoulder Surfing

Observing someone typing their password.



Social Engineering

Attackers use social engineering techniques to trick people into revealing passwords.

Key Logging

An installed keylogger intercepts passwords as they are typed.



...and how to improve your system security

Help users cope with 'password overload'

- Only use passwords where they are really needed.
- Use technical solutions to reduce the burden on users.
- Allow users to securely record and store their passwords.
- Only ask users to change their passwords on indication of suspicion of compromise.
- Allow users to reset password easily, quickly and cheaply.

Help users generate appropriate passwords

- Put technical defences in place so that simpler passwords can be used.
- Steer users away from predictable passwords – and ban the most common.
- Encourage users to never re-use passwords between work and home.
- Train staff to help them avoid creating passwords that are easy to guess.
- Be aware of the limitations of password strength meters.



Blacklist the most common password choices



Monitor failed login attempts... train users to report suspicious activity



Prioritise administrator and remote user accounts



Don't store passwords in plain text format.



Change all default vendor supplied passwords before devices or software are deployed

Use account lockout, throttling or monitoring to help prevent brute force attacks



For more information go to www.ncsc.gov.uk @ncsc



How long it takes to crack a password?



number of Characters	Numbers only	Upper or lower case letters	upper or lower case letters mixed	numbers, upper and lower case letters	numbers, upper and lower case letters, symbols
3	Instantly	Instantly	Instantly	Instantly	Instantly
4	Instantly	Instantly	Instantly	Instantly	Instantly
5	Instantly	Instantly	Instantly	3 secs	10 secs
6	Instantly	Instantly	8 secs	3 mins	13 mins
7	Instantly	Instantly	5 mins	3 hours	17 hours
8	Instantly	13 mins	3 hours	10 days	57 days
9	4 secs	6 hours	4 days	1 year	12 years
10	40 secs	6 days	169 days	106 years	928 years
11	6 mins	169 days	16 years	6k years	71k years
12	1 hour	12 years	600 years	108k years	5m years
13	11 hours	314 years	21k years	25m years	423m years
14	4 days	8k years	778k years	1bn years	5bn years
15	46 days	212k years	28m years	97bn years	2tn years
16	1 year	512m years	1bn years	6tn years	193tn years
17	12 years	143m years	36bn years	374tn years	14qd years
18	126 years	3bn years	1tn years	23qd years	1qt years

Passwords - 3 Random Words

david

Instantly

d4v1d123

1 Minute

handssentdry

4 Weeks

HandsSentDry

300 Hundred Years

Hands-Sent-Dry

29 Million Years





Your email is the key. It's the one account that links into all your other accounts, and your Facebook profile usually has everything I need to get into it.

- CONVICTED CRIMINAL

This quote was obtained by the City of London Police's Proactive Intelligence Team





Once I'm in your emails, I'll start searching for things with your financial details, like bills and receipts. I'll look for any online accounts you have registered with that email address and then use password resets to takeover those accounts too.

- CONVICTED CRIMINAL

This quote was obtained by the City of London Police's Proactive Intelligence Team



HOW DO I PROTECT MYSELF – 3

VIRUS PROTECTION SOFTWARE

- Virus / Malware Protection software.
 - Paid subscription e.g. McAfee, Norton, Kaspersky. Challenge the annual renewal fees.
 - Free e.g. AVG, Windows Defender provided by Microsoft with Windows 10.
 - Make sure you set up automatic loading of the daily updates of new malware fixes.
 - Check the protection offered by your ISP, including WiFi Router firewall protection
 - Be careful not to inadvertently run two of the above. Your device will slow to a crawl.
- **Ensure you are allowing the regular automatic updates of your OS**



HOW DO I PROTECT MYSELF – 3

VIRUS PROTECTION SOFTWARE

KEY POINTS TO REMEMBER

- Virus protection software tries to identify and destroy malware as it enters your device before it enters your Operating System to cause problems.
- Daily (subscription) updates identify newly found malware.
- The regular update patches sent out by Windows, IOS etc, are to eliminate weaknesses in your Operating System thus preventing present and future malware enter via that route.

BOTH UPDATES ARE VITAL TO YOUR DEVICE'S HEALTH.



HOW DO I PROTECT MYSELF – 4

- **DO NOT** use a public PC, such as in an Internet Café, to conduct secure transactions, e.g. your Banking or Online purchases.
- Social Networking – Privacy settings
 - Facebook
 - If your privacy settings are open, then the whole world can find out about you. Just watch the next video.
 - Also the John Terry case.
- APPs. If you receive a bill to be paid online. Call or write to the company and ask their finance department to confirm the bank details you have received.

Social media and online privacy



www.cifas.org.uk

- Cifas is a not-for-profit fraud prevention membership organisation. We are the UK's leading fraud prevention service, managing the largest confirmed fraud database in the country. Our members are organisations from all sectors, sharing their data across those sectors to reduce instances of fraud and financial crime.
- Throughout the UK, our experts and services help protect individuals and organisations from the growing and increasingly sophisticated threat of fraud and financial crime. Since 1988, Cifas has helped its members and customers protect themselves from billions of pounds worth of fraud losses.



Robert Morris -
Cryptograher

3 Golden rules to ensure
computer security:

1: Do not own a computer

2: Do not power it on

3: And do not use it.



EXAMPLES

Outlook Security Issue 02489-5695-14551

Outlook UK <TeamAllyn@hotmail.co.uk>

Fri 22/09/2017 13:02

To: kevin2503@hotmail.co.uk <kevin2503@hotmail.co.uk>;



Outlook Security Issue

Your profile will be blocked in response to a complaint received by the administration 20/09/2017

According to provision 13.3 of Terms, Hotmail.com may at any time, terminate its Services for account.

You can refute the statement, by following this link:

[Click Here](#)

If this complaint has not been rejected for 2 days, your mail account will be blocked.

Complaint ID: 25603.

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lawrence.regan.t21@ <btinternet.com efernandez@acquasolutions.net> on behalf of

Invoice: 373555608/MQ#IZQ/2017 (Dated 19 Sep 17)

Good Day,

Invoice Notification. Date:19 Sep 17. Got questions? Just give me a call at 01322 403635.

View And Pay Here:

<http://bepure.com/Invoice-Dated-19-Sep-17-1105510/XISG-ZCR/2017/>

Best Regards,

lawrence.regan.t21@btinternet.com

Tax Reference No: 008052017

Government Gateway service <refund@government-gateway-service.com>

Wed 13/09/2017 17:53

To: kevin2503@hotmail.co.uk <kevin2503@hotmail.co.uk>;



Dear kevin2503@hotmail.co.uk,

HM Revenue and Customs (HMRC) you have a tax refund.

Tax Reference No: 008052017

Following a review of your previous years tax payments we have determined that you are eligible to receive a tax refund of **£265.84 GBP**

Please click the link below in order to complete your tax refund request on our website. [Get Started →](#)

HM Revenue and Customs (HMRC) will usually send repayments within 2 weeks, but it may take longer in some cases

You should wait 4 weeks after making an online claim and 6 weeks after making a postal claim before contacting HMRC about the payment.

Yours sincerely,

HM Revenue and Customs

Thorpe Bay U3A



Incoming voicemail(s) at Sep 15

Whats App Messenger <ensileddd@jscpa.com>

Fri 15/09/2017 09:31

To: kevin2503@hotmail.co.uk <kevin2503@hotmail.co.uk>;

WhatsApp

You have a new voicemail.

Information

Time of Call: Sep 15 2017 10:31
Length: 06 seconds

autoplay

© 2014 WhatsApp Inc.



andyprince2@globomail.com on behalf of service@paypal.co.uk. <customerslinkverifier@accountant.com>

romalin@blueyonder.co.uk

12/11/20

CONFIRMATION OF FUND

Click here to download pictures. To help protect your privacy, Outlook prevented automatic download of some pictures in this message.

Right-click or tap and hold here to download pictures. To help protect your privacy, Outlook prevented automatic download of this picture from the Internet.

Right-click or tap and hold here to download pictures. To help protect your privacy, Outlook prevented automatic download of this picture from the Internet.

Right-click or tap and hold here to download pictures. To help protect your privacy, Outlook prevented automatic download of this picture from the Internet.

Dear PayPal User,

We are to let you know that the payment made for your item is confirmed and it has been deducted from the buyer's account which will be credited into your account as soon as you provide us with the shipment information.

We give you just 24 hours to do so or else your account may not be credited for the transaction.

We have received the money which is pending in our database and we will like you to provide us with the following information as requested by PayPal for verification to protect their customers from fraudulent business transactions.

Kindly make the shipment progress within 24 hours in order to release the money into your account for the transaction as we can not accommodate any form of misappropriations and we have a reputation to protect and do all that is possible to increase our business relationship with the international PayPal, Worldwide.

As soon as you notify us about the package shipping status, we shall deposit the said amount into your account immediately.

The address you are requested to ship the item to has been confirmed by us.

This is as a result of new safety measures that has just been adopted by us to safeguard all our customers against any internet act.

Thank you for using PayPal online services.

Suspicious activity detected

Paypal UK <harry@dogfields.de>

Fri 15/09/2017 04:32

To: kevin2503@hotmail.co.uk <kevin2503@hotmail.co.uk>;



Fri 15/09/2017 03:31:46 AM
Email ID: 78445PP007449541G

Dear kevin2503@hotmail.co.uk

Your account is limited

We detected something unusual about a recent sign-in to your account. As a precaution, we have limited access to your PayPal account in order to protect you against unauthorised transactions.

What do I have to do?

For reasons relating to the safe use of the PayPal service and to remove this limitation we need you to confirm your identity.

Failure to confirm your identity will automatically remove your account from verified status.

Account Status : Limited

[Confirm Your Identity](#)

Questions? Go to the [Help Centre](#).

Please do not reply to this email. This mailbox is not monitored and you will not receive a response.

Dyson V8 - Test me, keep me. ...



You've been chosen! <mynews@relate-post.orgjournal.com>

Sat 16/09, 20:26

You ↕

Dyson V8 - Test me, keep me

Having trouble viewing this email? [View here](#) for a web version

Important: Your account has received a voucher



Morrisons <reply@acai54.rakyan.net>

Sat 16/09, 22:36

kevin2503@ (hotmail.co.uk kevin2503@hotmail.co.uk) ✉

↩ Reply | ▾

Greetings kevin2503,

I am pleased to confirm that you can start the Morrisons quick survey anytime now. Access your account to receive your complimentary thank you voucher.

Go to: <https://groceries.morrisons.com/100xvouchers/qualtrics>

Your username: kevin2503

Thank you for your time.

Sebastian,

Customer Service Team

Dont want mail? You can be removed by: [clicking this link](#)

Pambam tech Solutions. D. No 16-55, Post box no 1 - Ibrahimpatnam, AP 521456 - India

We have limited all your activity such as buying or selling.

MyEbay <notification@myebayaccess.com>

Sat 23/09/2017 07:33

To: kevin2503@hotmail.co.uk <kevin2503@hotmail.co.uk>;

eBay

Dead kevin2503@hotmail.co.uk,

We have reason to believe that your Ebay account has been used fraudulently without your permission.

We have limited all your activity such as buying or selling.

To secure your eBay account, you need to :

- 1 - Login to your account.
- 2 - Verify the contact information.
- 3 - Update your payment informations.

Login now

Shop anywhere with
the eBay Mobile App



We don't check this mailbox, so please don't reply to this message. If you have a question, go to Help & Contact.

eBay sent this message to kevin2503@hotmail.co.uk. Learn more about account protection. eBay is committed to your privacy. Learn more about our privacy notice and user agreement! .

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From:Mr. M.Hasam
Alternative email:musahasan123@netscape.net
Lagos-Nigeria.
Attn:President/Ceo.

STRICTLY CONFIDENTIAL BUSINESS PROPOSAL RE: TRANSFER OF US\$21.5 MILLION

First, I must solicit your confidence in this transaction, this is by virtue of its nature as being utterly confidential and top secret. Though I know that a transaction of this magnitude will make any one apprehensive and worried, but I am assuring you that all will be well at the end of the day.

I am a member of the Federal Government of Nigeria Contract Award and Monitoring Committee in the Nigerian National Petroleum Corporation (NNPC). Sometime ago, a contract was awarded to a foreign firm in NNPC by my Committee. This contract was over invoiced to the tune of US\$21.5M. U.S. Dollars. The over-invoicing was a deal by my committee to benefit from the project. We now want to transfer this money which is in a suspense Account with NNPC into any Overseas Account which we expect you to provide for us.

For assisting us in this deal, you will be entitled to 30% of the money,60% will be for me and my partners while 10% has been mapped out from the total sum to cover any expenses that maybe incurred by us during the course of this transfer, both locally and international expenses.

I would require-

1. Your Company's Name, Address, Tel.& Fax. Numbers.
2. Your Bank Account Number and Address where the money will be remitted.

We have strong reliable connections and contacts at the Apex Bank (Central Bank of Nigeria), as well as the Federal Ministry of Finance and we have no doubt that all the money will be released and transferred if we get the necessary foreign partner to assist us in this deal. Therefore, when the business is successfully concluded we shall through our same connections withdraw all documents used from all the concerned Government Ministries for 100% security. We are ordinary civil servants and we will not want to miss this once in a lifetime opportunity to get rich.

We want this money to be transferred to your nominated bank for us, before the present Democratic Government start Auditing all Federal Government owned Parastatals. Please contact me immediately through my alternative email above whether or not you are interested in this deal. If you are not, it will enable me scout for another foreign partner to carry out this deal. But where you are interested, send the required documents aforementioned herein through my above my alternative email, as time is of the essence in this business.

I wait in anticipation of your fullest co-operation.

Yours faithfully,
Mr. M.Hasam