



**/// Cyber Smart Week**  
**Te Pai Ora o Aotearoa**

**31 October 2023**



# Computer Emergency Response Team

- We are a government agency.
- We work to improve New Zealanders' cyber resilience.
- We provide support to New Zealanders affected by cyber incidents.
- We provide educational resources and presentations.
- We publish data and insights on the cyber threat landscape.
- We collaborate with industry and government to prevent cyber threats.

# //// Today's agenda

- Cyber landscape
- Phishing and credential harvesting
- Business account compromises
  - Remote access scams
  - Invoice scams
  - Account takeovers
- Malware and ransomware
- Five simple steps for employees
- Securing your business from cyber threats
- Cyber Smart Week campaign.





# Themes and trends in the cyber security environment

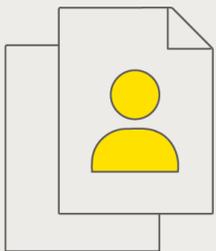
# /// 2022 annual report highlights



**8,160 incident reports**  
were received.



**\$20 million**  
in reported losses.

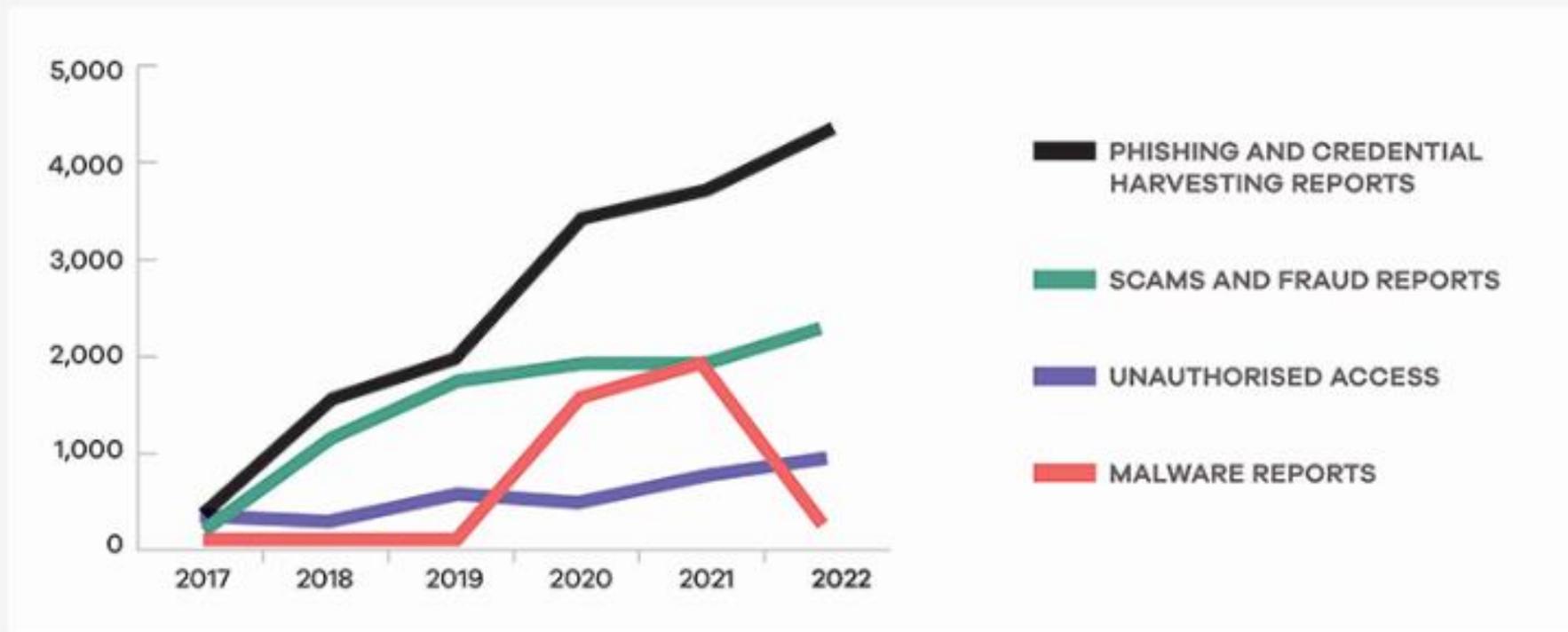


**41 vulnerabilities**  
were reported.



**Phishing reports**  
**continued to increase**  
and made up 56% of incident  
reports.

# /// Most reported incident types

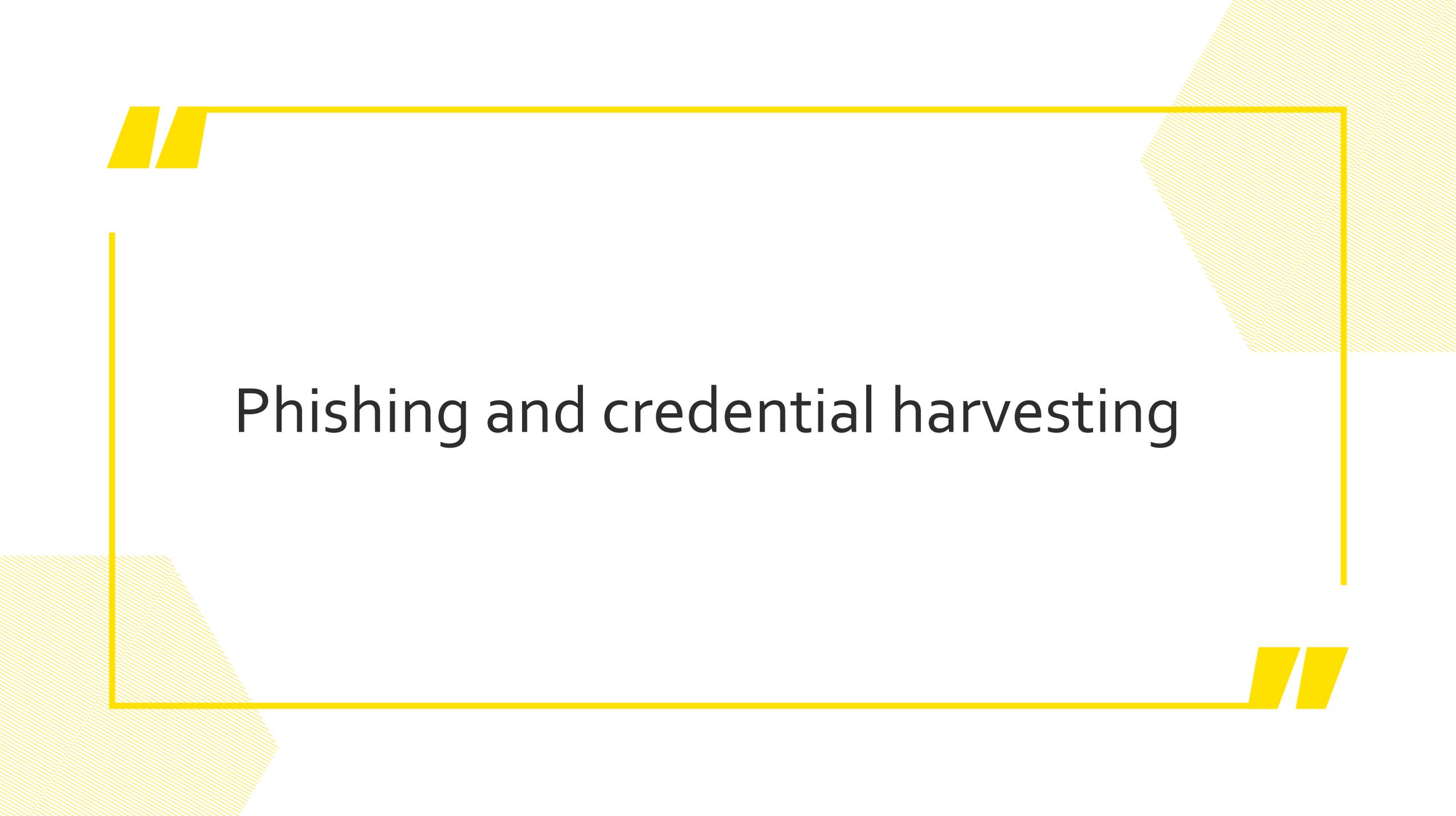


# /// Breakdown of financial loss in 2022

Of the total of \$20 million lost in 2022, scams and fraud accounted for almost \$17.1mil – 86 % of overall direct financial loss.

A third involved unauthorised money transfers – with the other two-thirds resulting from people being tricked into transferring money.





# Phishing and credential harvesting

# //// Phishing scams

Phishing is the practice of sending fraudulent messages purporting to be from a reputable person or business to induce the recipient to reveal personal or financial information or to take an action which causes them loss or compromises their security.

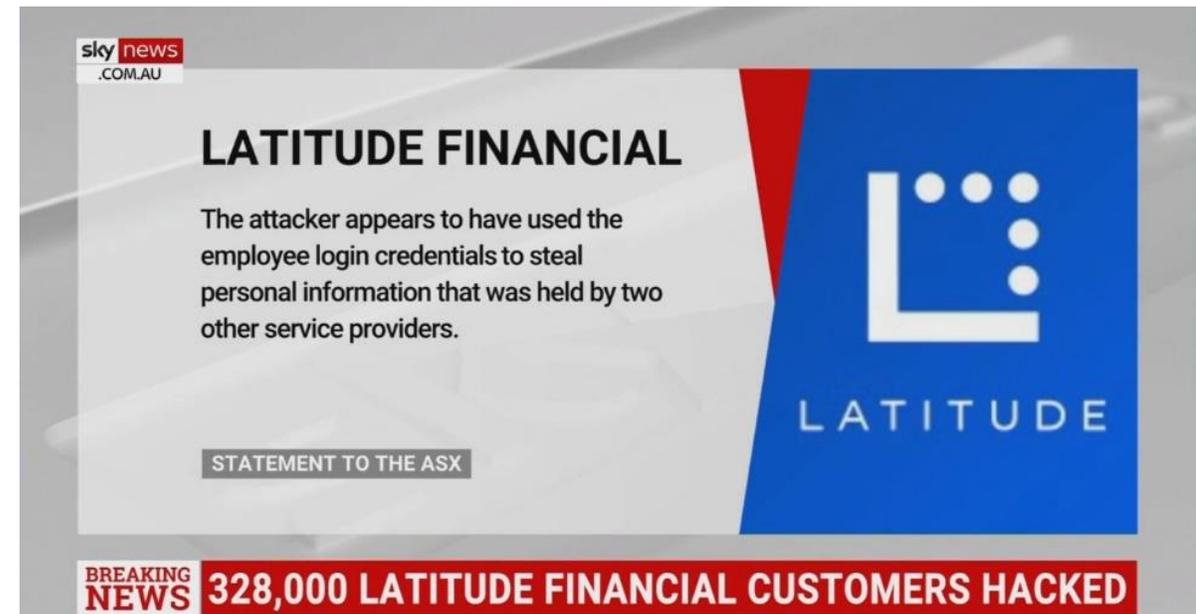
Often phishing is the first line of compromise which leads to more disruptive attacks.



# /// Phishing impacts

Impacts of phishing can be significant, and include:

- Financial loss
- Disruption to business operations
- Privacy breaches
- Reputational damage
- Reduction in trust and confidence



----- Forwarded message -----

From: [REDACTED]@aol.com>

Date: Sat, Aug 11, 2018 at 2:43 PM

Subject: Re: Hello

To: [REDACTED]@gmail.com

Alright, I'm sorry I'm putting this to you. I'm currently in a meeting. Please I need you to purchase iTunes gift card 5 pieces - \$100 each at the store? I would reimburse you when am through, Let me know if you can help with that right now. Thanks

Regards

[REDACTED]

On Saturday, 11 August 2108, [REDACTED]@gmail.com> wrote:

Sorry had a 10:15 with my mentor.

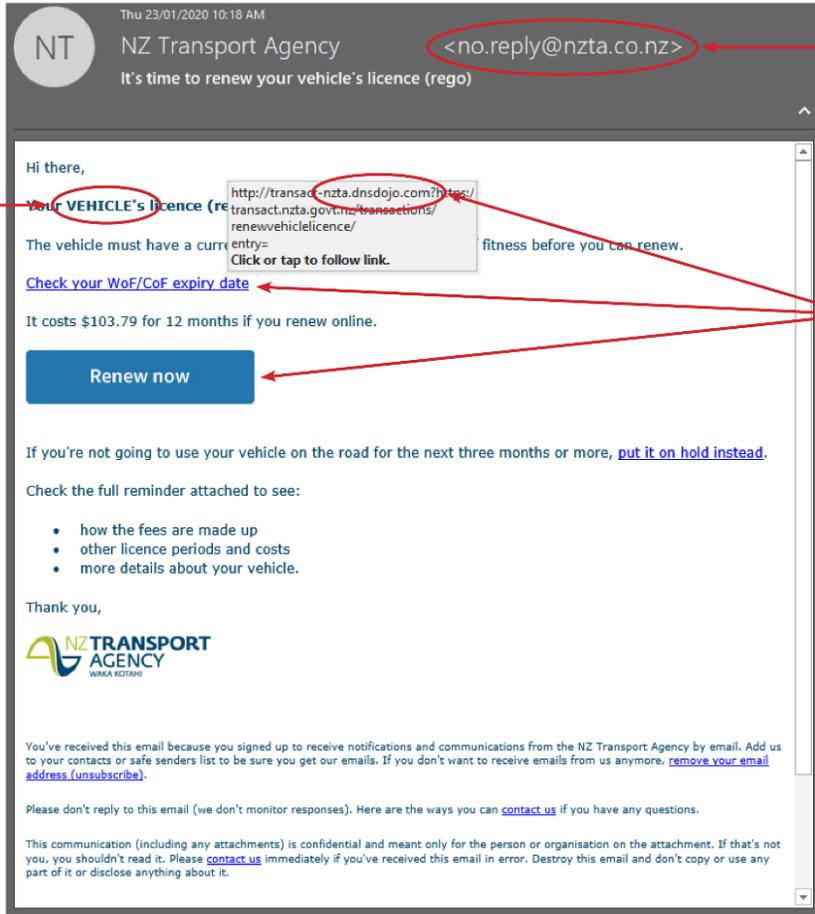
On Sat, Aug 11, 2018 at 1:28 PM, [REDACTED]@aol.com> wrote:

[REDACTED] Are you free at the moment?

Regards

[REDACTED]

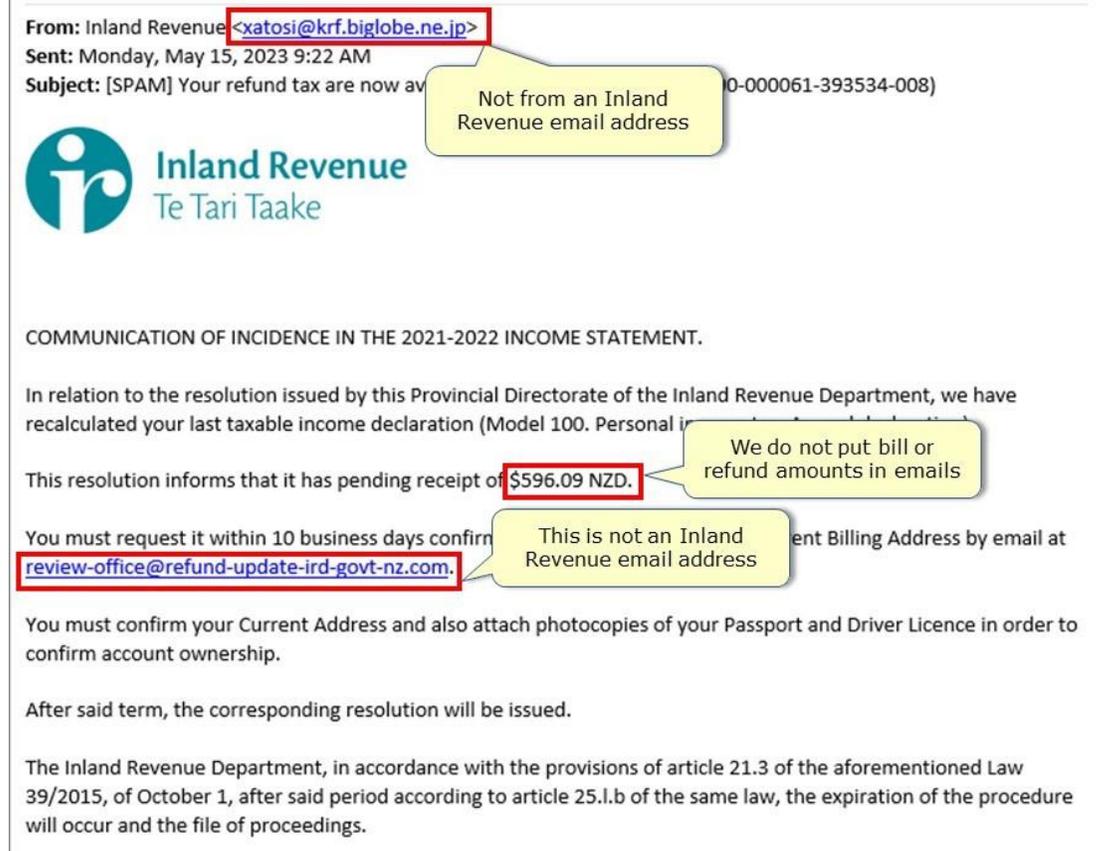
Sent from my iPhone



Doesn't include your specific details like vehicle make, plate or expiry date

Not from @nzta.govt.nz

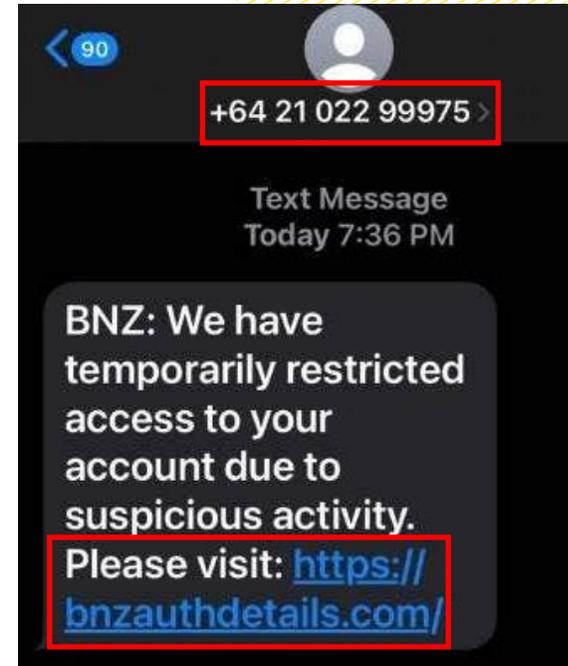
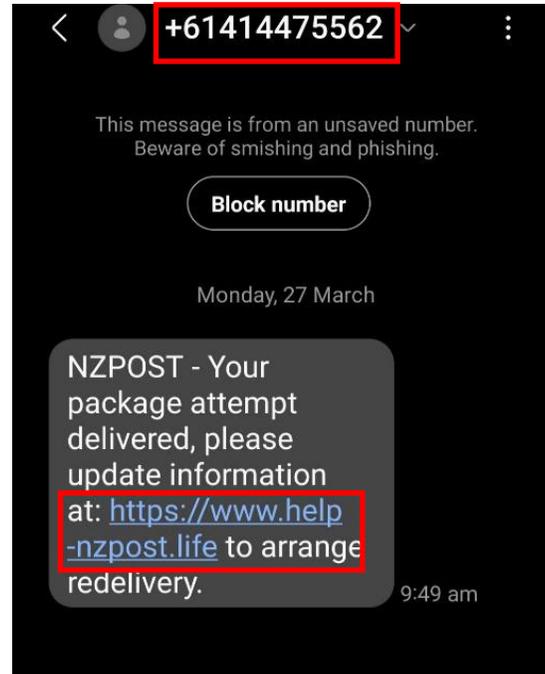
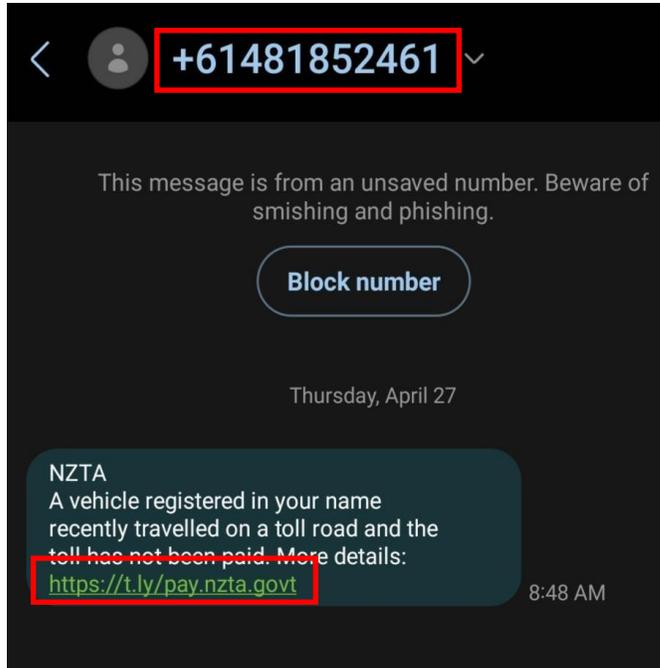
Hovering over links show you they don't go to nzta.govt.nz



Not from an Inland Revenue email address

We do not put bill or refund amounts in emails

This is not an Inland Revenue email address



# /// Phishing scam prevention

## How to spot them

- Check email addresses
- Check phone numbers
- Check URLs of links & websites
- Stop and think if the message:
  - Is out of the blue
  - Doesn't match usual activities
  - Creates a sense of urgency
  - Requests payment or credentials.

## How to report them

- Mark as junk or phishing through your email provider.
- Forward text messages to 7726 (Department of Internal Affairs)
- Forward emails to [phishpond@ops.cert.govt.nz](mailto:phishpond@ops.cert.govt.nz) (CERT NZ)



A man with dark hair, wearing glasses and large black headphones, is shown in a call center environment. He is sitting at a desk, looking off-camera with a thoughtful expression, his hand resting on his chin. The background is blurred, showing other workstations and computer monitors. The image is framed by a yellow border with decorative yellow bars at the top-left and bottom-right corners.

# Scams targeting businesses

# /// Social media account takeovers

Malicious actor gains unauthorised access to a social media account with malicious intent.

The accounts are commonly compromised via phishing, and then used to defraud others.

## How to prevent account takeovers

- Long, strong unique passwords
- Change passwords periodically
- Enable 2FA
- Being phishing-conscious

# /// Social media account takeovers continued

## What to do if your account is compromised

- Report it to the platform and ask others to report the account.
- Inform your customers so they aren't defrauded.
- If your email account is still secure, use the account recovery process.
- If you are unable to recover the account, create a new account.
- Report the compromise to CERT NZ for personalised incident recovery advice.



# /// Invoice scams

Scammers compromise a business' email account and send invoices requesting payment to a new bank account.

or

Scammers send fake invoices requesting payment for goods or services that you didn't ask for or receive.

## How to prevent invoice scams

- Keep your business accounts secure.
- Check the email address before paying invoices.
- Double check any new or changed bank account numbers.
- Consider electronic invoicing options.

# /// Remote access scams

In a remote access scam, a scammer attempts to persuade you into giving them remote control over your computer.

Once they have access, they can steal information and/or money.

## **Impersonation tactics**

- International software companies
- Telecommunications or tech firms
- Bank fraud teams
- Law enforcement
- Local or overseas regulators.

# /// Remote access scams continued

## How to prevent them

- Never give remote access to someone unless you've requested it first.
- Never access banking or sensitive information during a remote access session.
- Don't save your passwords in your browser.

## How to report them

- Report the phone number to your telecommunications provider.
- Report unauthorised transactions to your bank.
- Report the scam to CERT NZ.



# Malware and ransomware



# /// Malware

Malware is software specifically designed to disrupt, damage or gain unauthorised access to a computer system.

Once malware is on a device, cyber criminals can steal sensitive information, encrypt data or increase system vulnerabilities.

## Common types of malware

- Usually attached to files from:
  - Emails
  - Downloads
  - Portable devices (like USBs)
- Different types include:
  - Worms
  - Trojans
  - Spyware and adware

# //// Ransomware

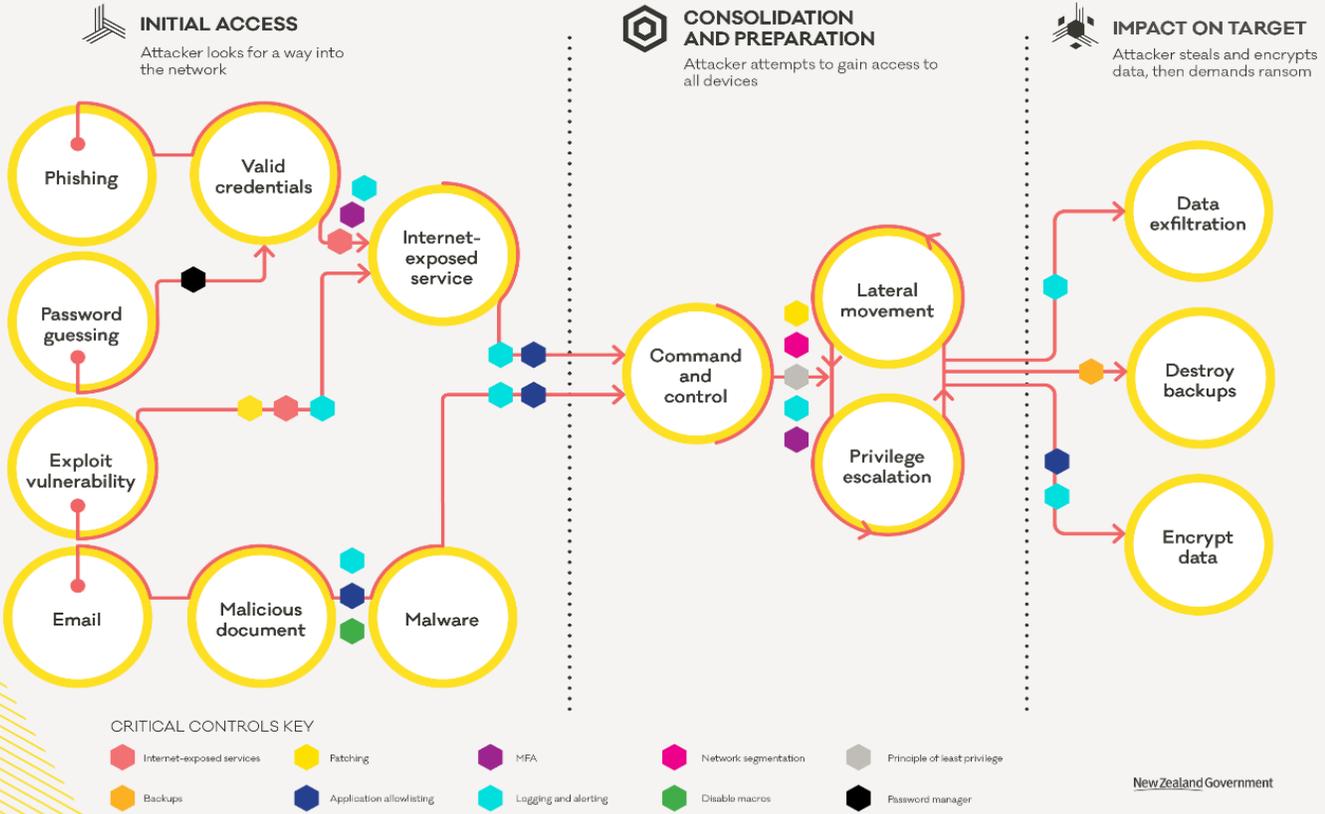
Ransomware is a financially-motivated cybercrime. It is a type of malware designed to block access to a computer system until a sum of money is paid.

Ransomware actors are increasingly well-resourced and sophisticated.



# LIFECYCLE OF A RANSOMWARE INCIDENT

How the CERT NZ Critical Controls can help you stop a ransomware attack in its tracks.



New Zealand Government



Five steps for  
employees to  
keep secure

# /// Long, strong, unique passwords

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- Longest is strongest: use at least 15 characters.
- Use a passphrase that's four or more words.
- Always use unique passwords for critical accounts.
- Avoid common patterns and personal information.
- Check if your password has been compromised at [haveibeenpwned.com](https://haveibeenpwned.com).



# /// Turn on two-factor authentication (2FA)

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- 2FA is a unique code sent to your phone or taken from an app that only you have access to.
- 2FA stops attackers from accessing your accounts with your login details and can let you know your account details have been compromised.
- Read 2FA codes carefully and only enter them if the message description matches the action you are taking.



# Update devices and apps

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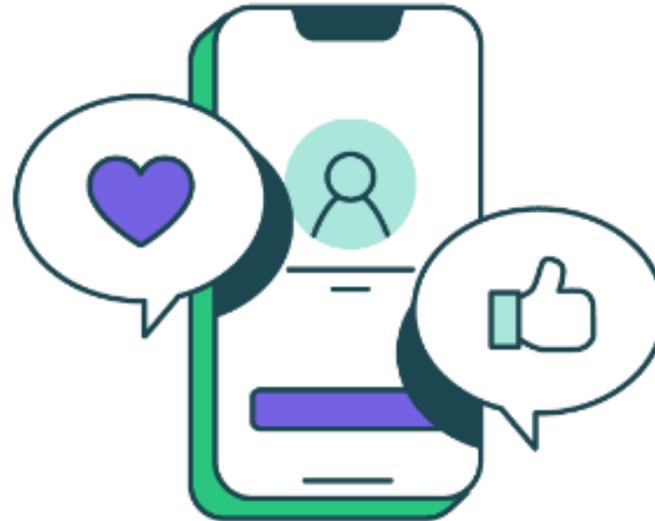
- Updating devices improves performance and fixes weakness that could let attackers in.
- The easiest way to do this is by going to settings and turning on automatic updates.



# /// Protect your privacy online

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- Be mindful about what you do online – your digital imprint is highly valuable.
- Check your privacy settings on social media.
- Use 'private' or 'friends only' to control who sees your information.
- Check websites are private before submitting personal information.

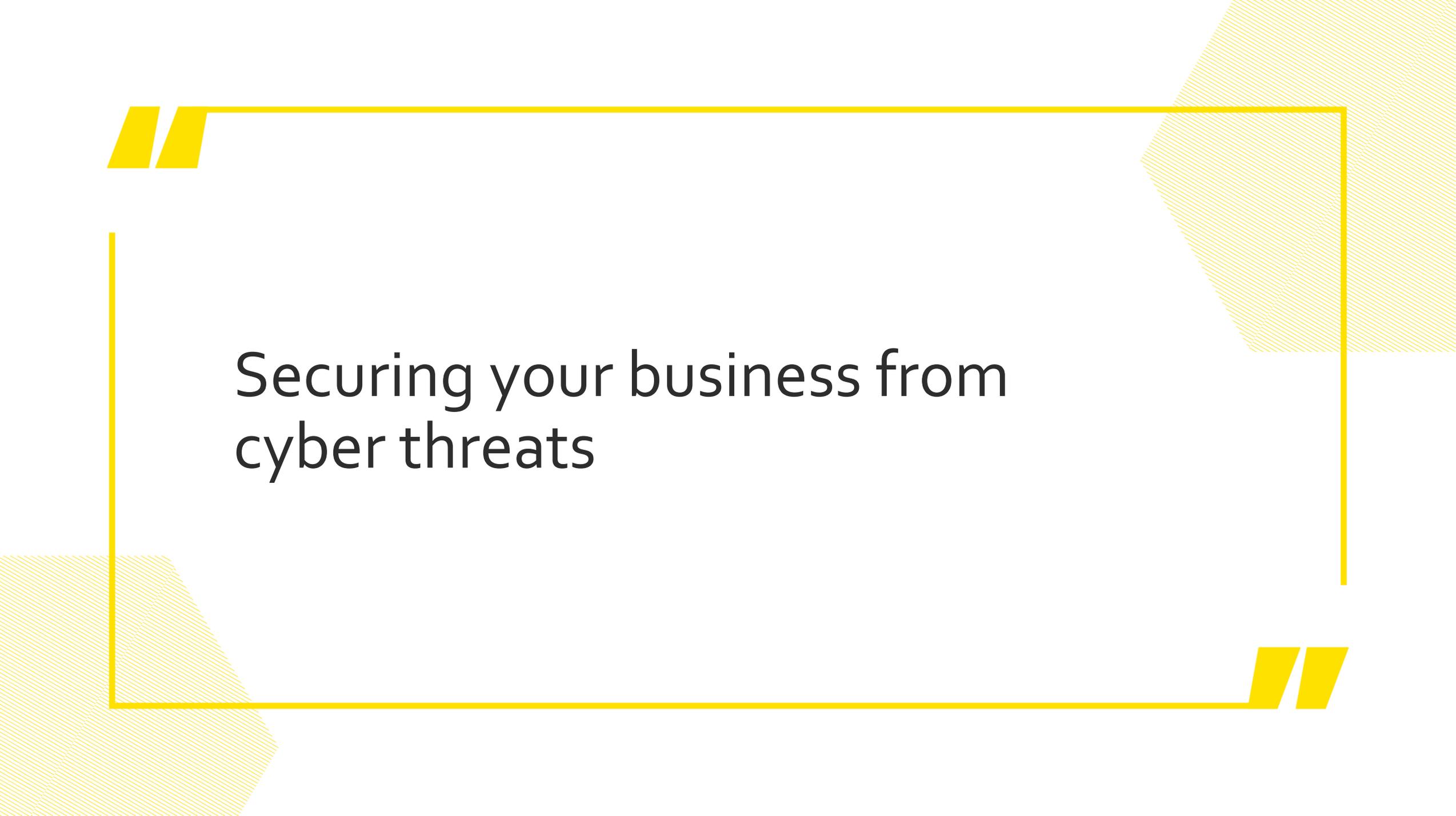


# /// Think before you click

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- Be wary of opening links and attachments.
- If you think the message is legitimate, check with the organisation or person.
- If it sounds too good to be true, it probably is.





# Securing your business from cyber threats

# /// Knowing and responding to cyber risks

## Building cyber security awareness

- 82% of cyber breaches involve a human element.
- People can be the strongest cyber defence.
- Invest in awareness and training.

## Creating an incident response plan

- Have a written plan which is accessible, and staff are familiar with.
- Understand your risks.
- Identify and report incidents.
- Determine incident sale and response.

# /// Elevate your cyber security posture

## Top 11 cyber security tips

- Install software updates
- Implement 2FA
- Back up data
- Set up logs
- Create an incident response plans
- Change default passwords
- Choose the right cloud services
- Only collect the data you need
- Secure your devices
- Secure your network
- Check financial details manually.

## CERT NZ's Critical Controls

- Patch your software and systems
- Implement MFA and verification
- Provide and use a password manager
- Configure logging and alerting
- Security awareness building
- Asset lifecycle management
- Implement and test back ups
- Implement network segmentation
- Implement application control
- Enforce the principle of least privilege.



# A NEW CYBER SMART WEEK

## 30 October – 5 November 2023

Cyber attacks have been growing in prevalence and sophistication, and the need for strong cyber security practices has never been more important.

Unfortunately, many people aren't well equipped to face these growing threats.

We want to use Cyber Smart Week 2023 to change that...



# /// Cyber security is on the radar

**80%**

of New Zealand individuals and SMEs both saying they regularly hear about them

**98%**

of New Zealand can name at least one cyber threat

**60%**

of people are concerned about the safety of their personal information online

## /// But, it's not a priority

**17%**

of people have adopted a new cyber safe behaviour in the past six months

**79%**

Of individuals and 59% of SMEs have not reported a cyber incident in the past because they didn't think it was worth it

**58%**

say they don't know how to do it or it's too complicated

**57%**

say they keep forgetting to

**48%**

say they don't want to, or can't be bothered



# Cyber Smart Week 2023

30 October to 5 November

own  
your  
online

certnz 



**Don't  
expose  
your life  
online.  
Own it.**

Whatever you're doing online, you can be exposed to a cyber attack. Visit [ownyouronline.govt.nz](https://ownyouronline.govt.nz) and learn how to protect your life online.

**own  
your  
online**  
cyber smart week

# Cyber Smart Week 2023

**Theme:** Exposed

**Objective:** Raising the importance of cyber security by showing New Zealanders what's at stake when we don't get cyber security right.

Featuring ten New Zealanders who have been targeted by attackers going about their online lives.

certnz 



**Don't  
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Own it.**

Learn how to protect  
yourself online.  
[ownyouronline.govt.nz](http://ownyouronline.govt.nz)



## CERT NZ activity

- Free Auckland exhibition
  - Tuesday Club, 42 Airedale Street, Auckland CBD: 31 October–2 November
- [ownyouronline.govt.nz/exposed](http://ownyouronline.govt.nz/exposed)
- Outdoor billboards
- Social advertising
- Online advertising
- Webinars





**own  
your  
online**

Nou to ipurangi

own  
your  
online

Simplifying cyber security

## We're here to help you stay secure online

Own Your Online is part of the New Zealand government's work to raise understanding of cyber security issues for individuals and businesses.

Here you will find how you can get help if you've been effected by an online scam or incident, why being safe online is so important and discover how to be secure online.

**Looking for information for businesses?**

[Switch to business](#)



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# Any questions?

## Contact

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 [www.cert.govt.nz](http://www.cert.govt.nz)

 @CERTNZ