

Malware

What do we mean by malware?

What is it?

Where might you get it from?

How can you protect yourself from it?

Malware

Malware is **malicious software**.

That means that it's software that is bad news.

It might try to:

- disable your computer
- steal your data
- force you to watch adverts
- send email spam
- extort money

Oops, something has gone wrong. Your files have been encrypted.



What happened to my computer?

Your computer has been locked and all your files have been encrypted. You no longer have access to your files.

What can I do about this?

Only we can decrypt your files as we have the encryption key. No amount of searching on the Internet will help you.

Can I get the encryption key?

Of course. We'll happily decrypt your files if you follow the link below and send us \$300 of bitcoin.

What will happen if I don't pay?

If you don't pay within the time specified, we will permanently delete all your files.

Remaining time to decrypt your files before permanent deletion of files:

02:00:00

Pay now

Don't pay

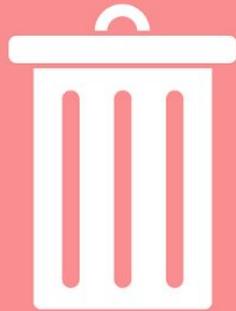


Send \$300 of bitcoin to this address:

<https://125tfs9uyfbyedjjuewwiytfvc>

Copy

Your files have been deleted



Oops, something has gone wrong. Your files have been encrypted.



Congratulations!

We've decrypted **50%** of your data.

Now pay an additional \$300 of bitcoin to decrypt the remaining 50%.



Send \$300 of bitcoin to this address:

<https://125tfs9uyfbyedjjuewwiytfvc>

copy

Malware

Viruses

Trojans

Worms



Adware

Spyware

Ransomware

Malware

Common ways to end up with malware on your device:

- click a link in a phishing email
- download an email attachment
- click a confirmation button on a pop-up without reading it
- download files such as movies, photos or games from dodgy websites

Malware - viruses

Viruses are a type of software that copies itself.

They can only infect a computer if the user runs some software or opens a file.

Once on a computer or network, a virus will copy itself by changing other computer programs and inserting code. They can then spread by being sent to other users.

Malware - worms

Worms copy themselves but do not attach themselves to files like a virus does.

Instead, worms spread through a network and use the computer's resources.

Many worms cause problems by using up network bandwidth and slowing down the network.

Malware - trojan

A **trojan** is a piece of software that looks like it's useful - like being a media file, a game or an add-on.

But it also performs some malicious action. For example, it might open a 'back door' to give an attacker remote access to your computer or include a virus or worm.

The name comes from the trojan horse of Greek mythology

Malware - ransomware

Ransomware is a type of virus - it copies its own code into other programs or files.

Ransomware locks a computer, encrypts files, and stops you being able to access your computer or your files.

The attacker will demand that a ransom be paid before they unlock the files or computer.

Malware - spyware

Spyware is software that monitors your computer and send information on what you do.

This can include monitoring your internet usage to send you harmless but annoying adverts.

More sinister spyware will include keyloggers that record every keystroke made by a user.

Malware

How can you stop malware?

- don't click links
- don't download software or media from sites that you don't trust
- use anti-virus software - that's up to date
- scan your computer
- be aware of warnings from your browser or e-mail software