MAINSTREAM digital
Future Communications

APPGUARD

Addressing the Cyber Security threat

It's easy to see why small and medium-sized organisations and enterprise (SMEs) are planning to spend more on security, when you consider the results of the annual Business Challenges survey of more than 1,000 SME owners. It found that 27% identified cyber security as the biggest threat to their business in 2022. The corresponding figure for 2021 was only 8%.

How do we protect ourselves? Cyber Security Mitigations are in the realm of Enterprise scale budgets.

No matter the size of your business, the impacts of Cyber crime are the same, and in many cases, the measures that we need to take are the same. We recognise the need to provide a service suitable for the Enterprise but scalable and affordable for SMEs and Micro SMEs.

There is no such thing as a silver bullet to solve your Cyber concerns, but we like to think that this is as good as it gets

Mainstream offer a range of services underpinned by capabilities born of the military and security services, covering the areas of:

- Monitoring and Detection
- Protection

Monitoring and detection in the form of a Security Operations Centre, and Protection in the form of Appguard.

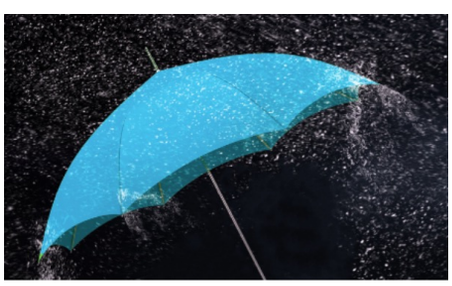
What is a Security Operations Centre and what would it do for you?

Security Operations Centres (SOCs) can vary widely in scope, but most are responsible for detecting and responding to cyber attacks.

Whilst the primary goal of cyber security is to prevent attacks, this is not always possible. The role of a SOC is also to limit the damage to an organisation by detecting and responding to cyber attacks that successfully bypass your preventative security controls.

Equally, a SOC can include a multitude of security activities, such as vulnerability assessment, compliance activities and system configuration.

This is a lot of functionality for an organisation to maintain – hence, we offer this to you as a service – monitoring your surface areas for attack and responding accordingly to keep you safe.



And while we said there is no silver bullet, (and there isn't) what we offer is ground breaking and puts you in the strongest position possible

"Appguard" is a real time protection against all endpoint and server ransomware and malware, developed for Government Security agencies and utilising a unique approach to protection that eliminates many of the weaknesses of traditional Anti Virus and Unified Threat Management Solutions.

Let us explain to you what this means in English and show you how we can address your Cyber concerns.

Mainstream Digital offer a powerful combination of hardware, software and services to underpin the business focussed solutions and services that they offer

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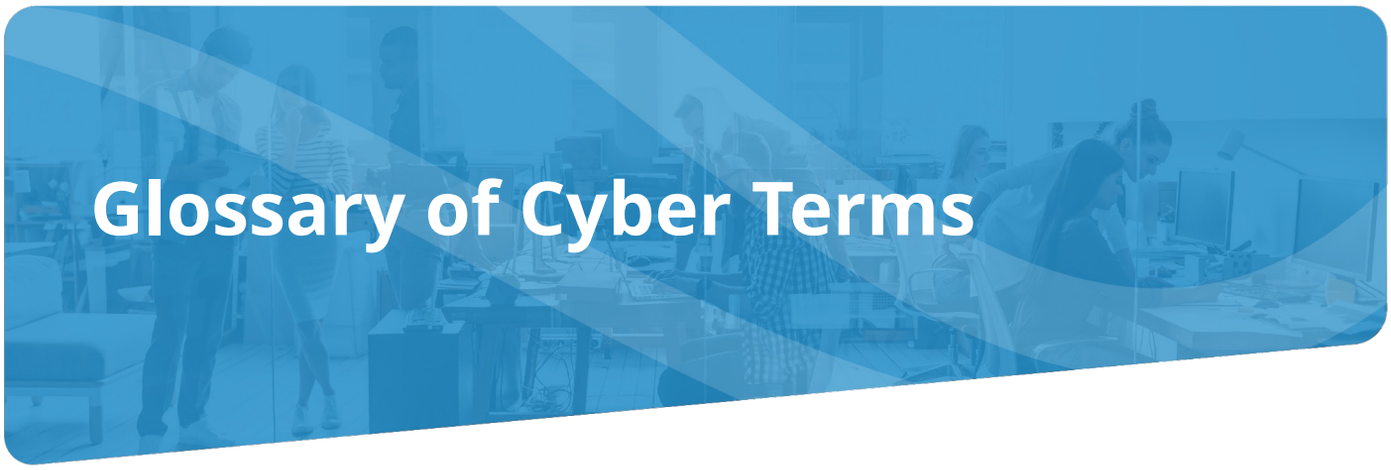

Glossary of Cyber Terms

A

antivirus

Software that is designed to detect, stop and remove viruses and other kinds of malicious software.

allowed list

Authorising approved applications for use within organisations in order to protect systems from potentially harmful applications. In the past the term ‘allowed list’ or ‘allow list’ may have been referred to as ‘whitelisting’.

app

Short for *Application*, typically refers to a software program for a smartphone or tablet.

attacker

Malicious actor who seeks to exploit computer systems with the intent to change, destroy, steal or disable their information, and then exploit the outcome.

B

blacklist

In computing,a **blacklist**, **disallowlist**, **blocklist**, or **denylist** is a basic access control mechanism that allows through all elements (email addresses, users, passwords, URLs, IP addresses, domain names, file hashes, etc.), except those explicitly mentioned.

botnet

A network of infected devices, connected to the Internet, used to commit coordinated cyber attacks without their owner's knowledge.

breach

An incident in which data, computer systems or networks are accessed or affected in a non-authorised way.

browser

A software application which presents information and services from the web.

brute force attack

Using a computational power to automatically enter a huge number of combination of values, usually in order to discover passwords and gain access.

bring your own device (BYOD)

An organisation's strategy or policy that allows employees to use their own personal devices for work purposes

C

certificate

A form of digital identity for a computer, user or organisation to allow the authentication and secure exchange of information.

ciso

chief information security officer

cloud

Where shared compute and storage resources are accessed as a service (usually online), instead of hosted locally on physical services. Resources can include infrastructure, platform or software services.

credentials

A user's authentication information used to verify identity - typically one, or more, of password, token, certificate.

cyber attack

Malicious attempts to damage, disrupt or gain unauthorised access to computer systems, networks or devices, via cyber means.

cyber incident

A breach of the security rules for a system or service - most commonly;

- Attempts to gain unauthorised access to a system and/or to data.
- Unauthorised use of systems for the processing or storing of data.
- Changes to a systems firmware, software or hardware without the system owners consent.
- Malicious disruption and/or denial of service.

cyber security

The protection of devices, services and networks — and the information on them — from theft or damage

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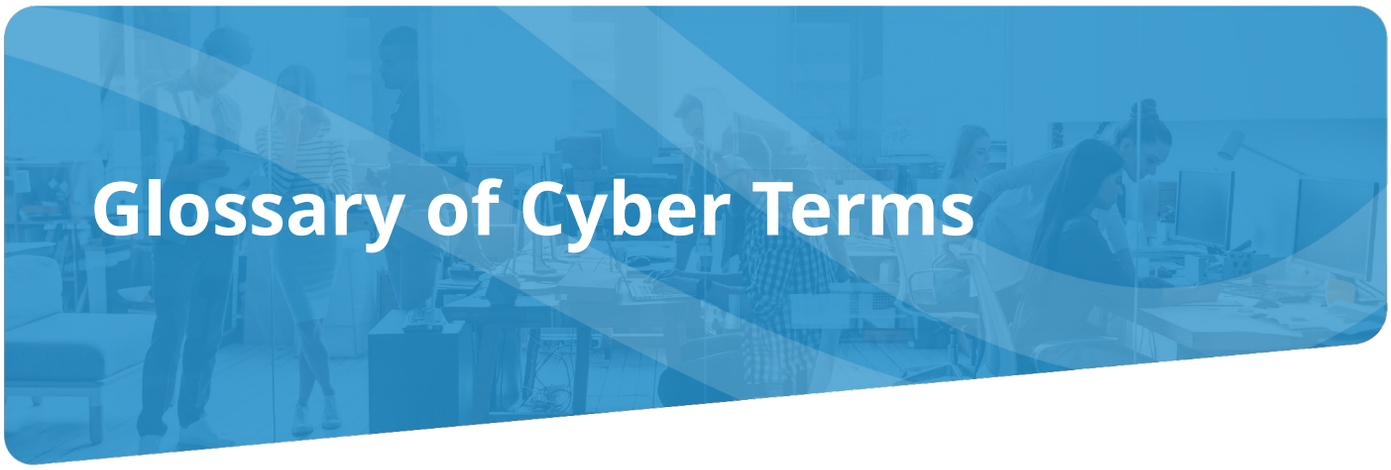

Glossary of Cyber Terms

D

data at rest

Describes data in persistent storage such as hard disks, removable media or backups.

deny list

An access control mechanism that blocks named entities from communicating with a computer, site or network. In the past the term 'deny list' may have been referred to as 'blacklisting', you can read about why the NCSC no longer use the term 'blacklisting' and other terminology in this blog.

dictionary attack

A type of *brute force attack* in which the attacker uses known dictionary words, phrases or common passwords as their guesses.

digital footprint

A 'footprint' of digital information that a user's online activity leaves behind.

denial of service (DoS)

When legitimate users are denied access to computer services (or resources), usually by overloading the service with requests.

download attack

The unintentional installation of malicious software or virus onto a device without the users knowledge or consent. May also be known as a drive-by download.

dpo

data protection officer

E

encryption

A mathematical function that protects information by making it unreadable by everyone except those with the key to decode it.

end user device (EUD)

Collective term to describe modern smartphones, laptops and tablets that connect to an organisation's network.

exploit

May refer to software or data that takes advantage of a vulnerability in a system to cause unintended consequences.

F

firewall

Hardware or software which uses a defined rule set to constrain network traffic to prevent unauthorised access to or from a network.

G

H

hacker

In mainstream use as being someone with some computer skills who uses them to break into computers, systems and networks.

honeypot (honeynet)

Decoy system or network to attract potential attackers that helps limit access to actual systems by detecting and deflecting or learning from an attack. Multiple honeypots form a honeynet.

I

incident

A breach of the security rules for a system or service, such as:

- attempts to gain unauthorised access to a system and/or data
- unauthorised use of systems for the processing or storing of data
- changes to a systems firmware, software or hardware without the system owner's consent
- malicious disruption and/or denial of service

insider risks

The potential for damage to be done maliciously or inadvertently by a legitimate user with privilleged access to systems, networks or data.

Internet of things (IoT)

Refers to the ability of everyday objects (rather than computers and devices) to connect to the Internet. Examples include kettles, fridges and televisions.

J

K

L

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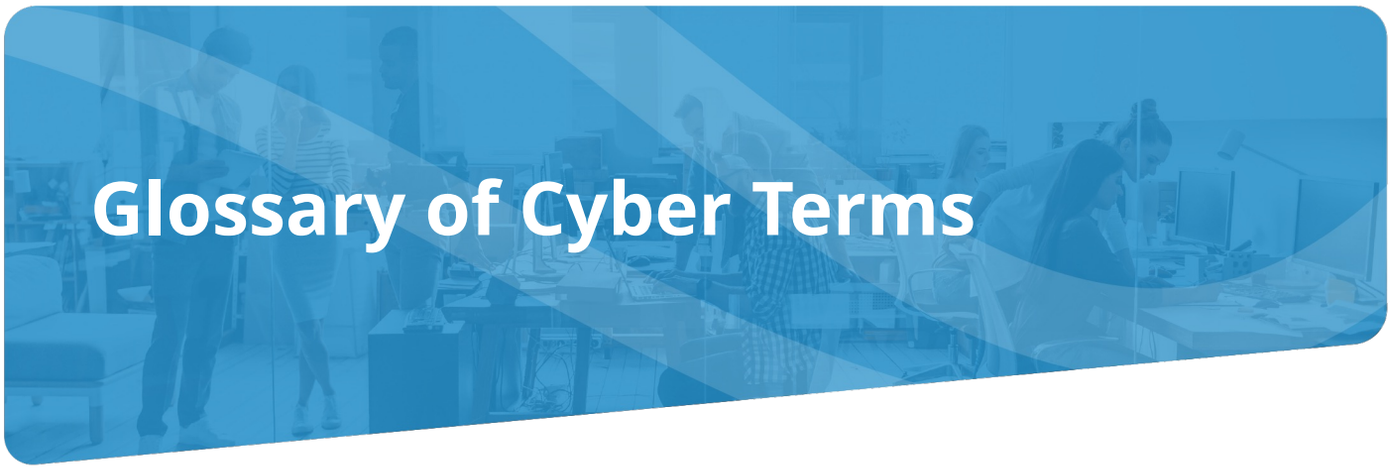

Glossary of Cyber Terms

M

macro

A small program that can automate tasks in applications (such as Microsoft Office) which attackers can use to gain access to (or harm) a system.

malvertising

Using online advertising as a delivery method for malware.

malware

Malicious software - a term that includes viruses, trojans, worms or any code or content that could have an adverse impact on organisations or individuals.

mitigation

Steps that organisations and individuals can take to minimise and address risks..

N

network

Two or more computers linked in order to share resources.

O

P

patching

Applying updates to firmware or software to improve security and/or enhance functionality.

pentest

Short for *pen*etration *test*. An authorised test of a computer network or system designed to look for security weaknesses so that they can be fixed.

pharming

An attack on network infrastructure that results in a user being redirected to an illegitimate website despite the user having entered the correct address.

phishing

Untargeted, mass emails sent to many people asking for sensitive information (such as bank details) or encouraging them to visit a fake website.

platform

The basic hardware (device) and software (operating system) on which applications can be run.

Q

R

ransomware

Malicious software that makes data or systems unusable until the victim makes a payment.

router

A network device which sends data packets from one network to another based on the destination address. May also be called a gateway.

S

security operations centre

A Security Operations Center (SOC) is a command center for cybersecurity professionals responsible for monitoring, analysing, and protecting an organisation from cyber attacks. In the SOC, internet traffic, internal network infrastructure, desktops, servers, endpoint devices, databases, applications, IoT devices, and other systems are continuously monitored for security incidents.

software as a service (SaaS)

Describes a business model where consumers access centrally-hosted software applications over the Internet.

sanitisation

Using electronic or physical destruction methods to securely erase or remove data from memory.

social engineering

Manipulating people into carrying out specific actions, or divulging information, that's of use to an attacker.

spear-phishing

A more targeted form of phishing, where the email is designed to look like it's from a person the recipient knows and/or trusts.

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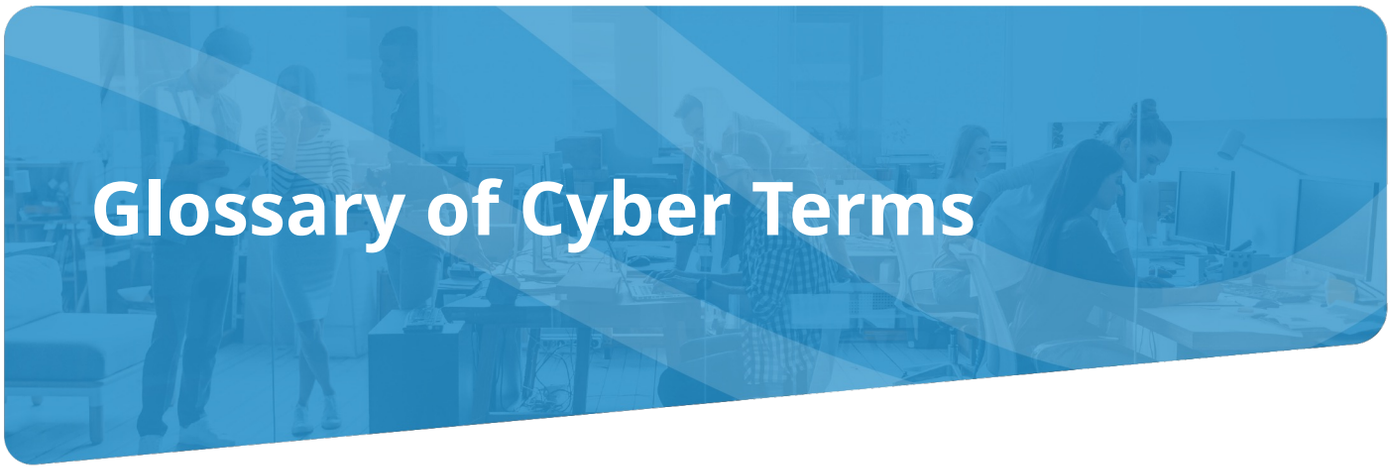

Glossary of Cyber Terms

T

trojan

A type of malware or virus disguised as legitimate software, that is used to hack into the victim's computer.

U

unified threat management

Unified threat management (UTM) is an approach to information security where a single hardware or software installation provides multiple security functions. This contrasts with the traditional method of having point solutions for each security function.[1] UTM simplifies information-security management by providing a single management and reporting point for the security administrator rather than managing multiple products from different vendors.

V

virus

Programs which can self-replicate and are designed to infect legitimate software programs or systems. A form of malware.

Virtual Private Network (VPN)

An encrypted network often created to allow secure connections for remote users, for example in an organisation with offices in multiple locations.

vulnerability

A weakness, or flaw, in software, a system or process. An attacker may seek to exploit a vulnerability to gain unauthorised access to a system.

W

water-holing (watering hole attack)

Setting up a fake website (or compromising a real one) in order to exploit visiting users.

whaling

Highly targeted phishing attacks (masquerading as a legitimate emails) that are aimed at senior executives.

whitelist

A whitelist is a mechanism which explicitly allows some identified entities to access a particular privilege, service, mobility, or recognition i.e. it is a list of things allowed when everything is denied by default

X

Y

Z

zero-day

Recently discovered vulnerabilities (or bugs), not yet known to vendors or antivirus companies, that hackers can exploit.

If you have a question that we have not answered here, contact us and we will answer it for you

Just call us on 0800 169 6000 to see what we can do to ease your concerns.

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