



# CYBER SECURITY

## Common Cyber Attacks

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## INTRODUCTION

In today's interconnected digital landscape, the prevalence of cyberattacks has become a ubiquitous concern for individuals, businesses, and governments alike. The world of cybersecurity is a battleground where attackers continually evolve their tactics to exploit vulnerabilities and gain unauthorized access to sensitive information. Understanding the most common cyberattacks is the first step towards fortifying your defenses and ensuring the safety of your digital assets. In this discussion, we will delve into some of the most widespread and perilous cyberattacks that individuals and organizations face, shedding light on the tactics, motivations, and impacts of these threats.



### ► 2. A denial-of-service attack

Cyber Attacks called denial of service (DoS) aim to disable a computer system. Attackers have two options: they can overwhelm a system or network and block all users at once, or they can intentionally lock out specific victims by purposely inputting the wrong password enough times in a row. DDoS assaults can take many different forms, including amplifications and reflection attacks, which trick gullible systems into delivering traffic to the target.

## MOST COMMON CYBER ATTACKS

### ► 1. Backdoor

Any covert technique of getting beyond standard authentication or security measures is known as a "backdoor" in computer systems. They could be there due to a variety of factors, such as inadequate configuration or poor design. They might have been introduced by a trusted party to permit legal access or by an attacker with evil intent. But whoever added them, they present a vulnerability. Backdoors are only found by someone with access to the source code of the application or in-depth knowledge of the computer's OS.





### ▶ 3. Direct access attack

It is most likely possible for an unauthorized person to physically access a computer and copy data from it. Additionally, they might alter the operating system, put in software worms, key loggers, hide listening devices, or use wireless microphones to breach security. By booting a different operating system or tool from a CD-ROM or other bootable media, security protections can be evaded even when the system is secured by industry-standard safeguards. These threats are shielded by Trusted Platform Module and disc encryption.

### ▶ 4. Eavesdropping

The act of listening secretly to a private computer conversation, usually between hosts on a network, is known as eavesdropping. Monitoring the weak electromagnetic emissions produced by the hardware enables eavesdropping on systems that are closed (i.e., without communication with the outside world).

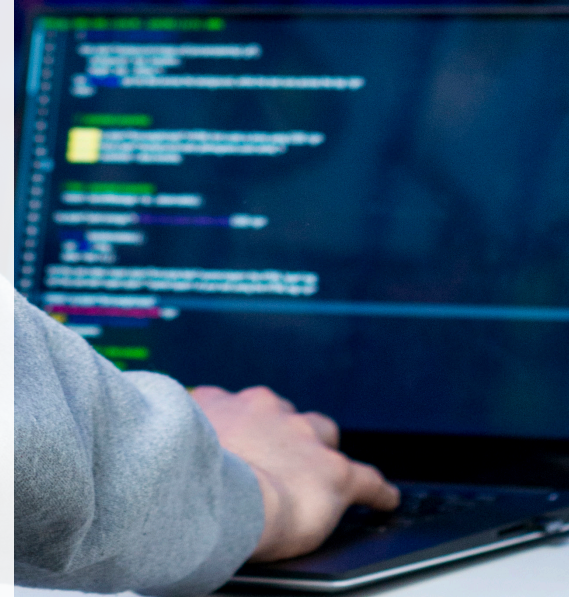
### ▶ 5. Phishing

- The attempt to trick consumers into disclosing personal information including usernames, passwords, and credit card numbers is phishing.
- Phishing frequently instructs people to enter information at a fake website whose "feel" and "look" are nearly comparable to the genuine one. It is typically carried out using email spoofing or instant messaging. The bogus website frequently requests personal information, including passwords and log-in information. Using this information, one can subsequently access the person's actual account on the actual website. Attackers are coming up with inventive strategies to access actual accounts.
- The most common scam these days is that the attackers are sending fake messages to victims showing the recent online purchase from their side. They ask them to click on a link if the purchases had not been authorized.

### ▶ 6. Side-channel attack

In side-channel attack, the attacker would gather information about a system or network to guess its internal state and subsequently access the data that the victim believes to be secure. These attacks are particularly insidious because they do not directly target software vulnerabilities or cryptographic weaknesses but instead focus on exploiting the physical implementation or behavior of a system.

In conclusion, the world of cybersecurity is a complex and dynamic landscape, with threats like these attacks posing serious challenges to the protection of sensitive data. Understanding and defending against these threats is essential for safeguarding information and privacy in the digital age.



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For more in-depth information on common cyber-attacks and how to protect your systems, please feel free to contact our IS Assurance and Advisory Team.

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