



Cyber Security

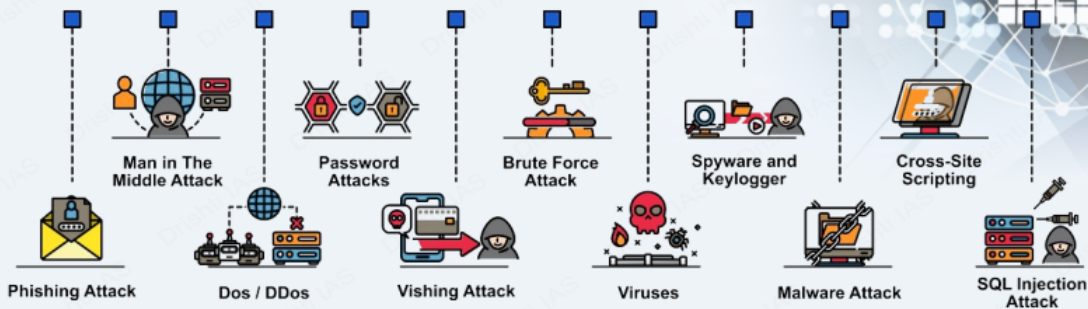
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CYBER SECURITY

Cybersecurity refers to any technology, measure, or practice for preventing cyberattacks or mitigating their impact.

CYBER SECURITY ATTACKS



'Crime in India' Report 2022 (NCRB) highlighted 24.4% surge in cybercrimes in India since 2021.

Common Cybersecurity Myths

- ⊖ Strong passwords alone are adequate protection
- ⊖ Major cybersecurity risks are well-known
- ⊖ All cyberattack vectors are contained
- ⊖ Cybercriminals don't attack small businesses

Cyber Warfare

- ⊖ Digital attacks to disrupt vital computer systems, to inflict damage, death, and destruction.

CYBER THREAT ACTORS

CYBER THREAT ACTOR

CYBER THREAT ACTOR	MOTIVATION
NATION-STATES	GEOPOLITICAL
CYBERCRIMINALS	PROFIT
HACKTIVISTS	IDEOLOGICAL
TERRORIST GROUPS	IDEOLOGICAL VIOLENCE
THRILL-SEEKERS	SATISFACTION
INSIDER THREATS	DISCONTENT

Types of Cybersecurity

- ⊖ Critical infrastructure security (Robust access controls)
- ⊖ Network security (Deploying firewalls)
- ⊖ Application security (Code reviews)
- ⊖ Cloud Security (Tokenization)
- ⊖ Information security (Data masking)

Recent Major Cyber Attacks

- ⊖ WannaCry Ransomware Attack (2017)
- ⊖ Cambridge Analytica Data Breach (2018)
- ⊖ Financial data of 9M+ cardholders, including SBI, leaked (2022)

Regulations & Initiatives

- ⊖ **International:**
 - ⊖ UN Group of Governmental Experts (GGE) on Advancing Responsible State Behaviour in Cyberspace
 - ⊖ NATO's Cooperative Cyber Defense Centre of Excellence (CCDCOE)
 - ⊖ Budapest Convention on Cybercrime, 2001 (India not a signatory)
- ⊖ **India:**
 - ⊖ IT Act, 2000 (Sections 43, 66, 66B, 66C, 66D)
 - ⊖ National Cyber Security Policy, 2013
 - ⊖ National Cyber Security Strategy 2020
 - ⊖ Cyber Surakshit Bharat Initiative
 - ⊖ Indian Cyber Crime Coordination Centre (I4C)
 - ⊖ Computer Emergency Response Team-India (CERT-In)

Steps Needed for Cyber Security

- ⊖ Network Security
- ⊖ Malware Protection
- ⊖ Incident Management
- ⊖ User Education and Awareness
- ⊖ Secure Configuration
- ⊖ Managing User Privileges
- ⊖ Information Risk Management Regime

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