

Glossary Cybersecurity

Terms and definitions from Course 2

A

Antivirus software: A software program used to prevent, detect, and eliminate malware and viruses

Assess: The fifth step of the NIST RMF that means to determine if established controls are implemented correctly

Asset: An item perceived as having value to an organization

Attack vectors: The pathways attackers use to penetrate security defenses

Authentication: The process of verifying who someone is

Authorization: The concept of granting access to specific resources in a system

Authorize: The sixth step of the NIST RMF that refers to being accountable for the security and privacy risks that might exist in an organization

Availability: The idea that data is accessible to those who are authorized to access it

B

Biometrics: The unique physical characteristics that can be used to verify a person's identity

Business continuity: An organization's ability to maintain their everyday productivity by establishing risk disaster recovery plans

C

Categorize: The second step of the NIST RMF that is used to develop risk management processes and tasks

Chronicle: A cloud-native tool designed to retain, analyze, and search data

Confidentiality: The idea that only authorized users can access specific assets or data

Confidentiality, integrity, availability (CIA) triad: A model that helps inform how organizations consider risk when setting up systems and security policies

D

Detect: A NIST core function related to identifying potential security incidents and improving monitoring capabilities to increase the speed and efficiency of detections

E

Encryption: The process of converting data from a readable format to an encoded format

External threat: Anything outside the organization that has the potential to harm organizational assets

I

Identify: A NIST core function related to management of cybersecurity risk and its effect on an organization's people and assets

Implement: The fourth step of the NIST RMF that means to implement security and privacy plans for an organization

Incident response: An organization's quick attempt to identify an attack, contain the damage, and correct the effects of a security breach

Integrity: The idea that the data is correct, authentic, and reliable

Internal threat: A current or former employee, external vendor, or trusted partner who poses a security risk

L

Log: A record of events that occur within an organization's systems

M

Metrics: Key technical attributes such as response time, availability, and failure rate, which are used to assess the performance of a software application

Monitor: The seventh step of the NIST RMF that means be aware of how systems are operating

N

National Institute of Standards and Technology (NIST) Cybersecurity Framework (CSF): A voluntary framework that consists of standards, guidelines, and best practices to manage cybersecurity risk

National Institute of Standards and Technology (NIST) Special Publication (S.P.) 800-53: A unified framework for protecting the security of information systems within the U.S. federal government

O

Open Web Application Security Project/Open Worldwide Application Security

Project (OWASP): A non-profit organization focused on improving software security

Operating system (OS): The interface between computer hardware and the user

P

Playbook: A manual that provides details about any operational action

Prepare: The first step of the NIST RMF related to activities that are necessary to manage security and privacy risks before a breach occurs

Protect: A NIST core function used to protect an organization through the implementation of policies, procedures, training, and tools that help mitigate

cybersecurity threats

R

Ransomware: A malicious attack where threat actors encrypt an organization's data and demand payment to restore access

Recover: A NIST core function related to returning affected systems back to normal operation

Respond: A NIST core function related to making sure that the proper procedures are used to contain, neutralize, and analyze security incidents, and implement improvements to the security process

Risk: Anything that can impact the confidentiality, integrity, or availability of an asset

Risk mitigation: The process of having the right procedures and rules in place to quickly reduce the impact of a risk like a breach

S

Security audit: A review of an organization's security controls, policies, and procedures against a set of expectations

Security controls: Safeguards designed to reduce specific security risks

Security frameworks: Guidelines used for building plans to help mitigate risk and threats to data and privacy

Security information and event management (SIEM): An application that collects and analyzes log data to monitor critical activities in an organization

Security orchestration, automation, and response (SOAR): A collection of applications, tools, and workflows that use automation to respond to security events

Security posture: An organization's ability to manage its defense of critical assets and data and react to change

Select: The third step of the NIST RMF that means to choose, customize, and capture documentation of the controls that protect an organization

Shared responsibility: The idea that all individuals within an organization take an active role in lowering risk and maintaining both physical and virtual security

Social engineering: A manipulation technique that exploits human error to gain private information, access, or valuables

Splunk Cloud: A cloud-hosted tool used to collect, search, and monitor log data

Splunk Enterprise: A self-hosted tool used to retain, analyze, and search an organization's log data to provide security information and alerts in real-time

T

Threat: Any circumstance or event that can negatively impact assets

V

Vulnerability: A weakness that can be exploited by a threat