



# Blue Team

## Certcop CertTips

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## Android Rooting

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Rooting is a Linux word syntax term. This indicates that the user has the special privilege of using a mobile phone. Users may take control of their phone's SETTINGS, FEATURES and PERFORMANCE.

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## Application Framework

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It offers numerous key classes for the creation of an Android app. It offers a general summary of hardware access and helps to manage application resources in the user interface.

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## Android architecture

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It comprises many components to satisfy all the requirements of Android devices. An open-source Linux kernel with a set of C/C++ library

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## Android Device Hacking

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As these gadgets serve a wide range of functions, the number of individuals using smartphones and tablets is rising quickly. It is a platform that is accessible to all apps. Android is the most popular mobile OS.

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## Availability

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IT refers to the ability of a user to access information or resources in a specified location and in the correct format.

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## Android OS

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The Android operating system is a Google mobile operating system. Its design allows users to intuitively use mobile devices, Google uses Android software also with a distinct user experience for TVs, automobiles and wristwatches.

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## Android OS Architecture

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## Active Network Threats

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An active attack is one in which an attempt is made to make unauthorized changes to the system. Modifications to transmitted or stored data, as well as the formation of new data.

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## Application-level filtering

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Email filters and web proxies are examples of application level filters. These act as proxies for one or more services.

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## Anomaly Detection

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These systems that look for unusual changes in behaviour patterns to detect uncatalogued attacks.

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## Adware

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Software that automatically displays or downloads advertisements. While not all adware is malicious, many of such are associated with spyware and other types of malicious software (malware).

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## Agencies in third-party

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They are the responsible for selecting a cloud service, Leveraging the FedRAMP Process and Requiring CSPs to meet FedRAMP requirements.

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## Awareness and Training (AT) in security control

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Employees are educated about the cyber security landscape through Security Awareness Training. Security Awareness Training uses a variety of learning methodologies to help raise awareness of cyber security dangers, lower the risks associated with cyber-attacks, and cement a security compliance culture in your organization.

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## Audit and Accountability (AU)

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The Audit and Accountability (AU) objective's goal is to make sure there are enough controls in place to give auditable evidence for system transactions and that key records are kept for a long enough time.

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## Access Control (AC)

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The selective restriction of access to a place or other resource is known as access control (AC), while the process is known as access management. Consuming, entering, or using are all words that can be used to describe the process of accessing. Authorization is the process of gaining access to a resource.

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## Asset Inventory

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It is critical to understand where information is stored in order to protect it. The physical and logical components must be included in the asset inventory. For each piece, it should describe the location, business processes

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## Asset management systems

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The Asset Management System (AMS) is a collection of tools and procedures for establishing asset management policies and objectives.

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## Application Scanner

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Applications vulnerability scanners test websites in order to detect known software vulnerabilities and erroneous configurations in network or web applications.

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## Acunetix

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It's a comprehensive web application security testing solution that can be used on its own or in conjunction with other tools in a complicated context.

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## Aircrack-ng

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Aircrack-ng is a complete suite of tools to assess WiFi network security.

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## Attacking in Aircrack-ng

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Replay attacks, de-authentication, fake access points and others via packet injection

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## Access Point (AP)

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A wireless access point (AP) is a network device that sends and receives data via a wireless local area network (WLAN). The WLAN and a fixed wire network are connected through the wireless access point.

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## Angry IP Scanner

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The program may also provide access to the shared resources discovered during the scan through HTTP, HTTPS, FTP, or shared folders. IP Range, Random or file in any format Exports results into many formats.

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## Acrylic Scanner

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Acrylic WIFI is a free Windows WIFI scanner. The dashboard displays real-time WIFI statistics. Acrylic WIFI allows you to enhance AP coverage and identify channel interference issues.

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## Authorizing users

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Access management guarantees that a person receives the exact level and type of access. Users can also be divided into groups or roles.

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## Authenticating users

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IAM systems verify a user's identity by validating that they are who they claim to be. Today, safe authentication entails multi-factor authentication (MFA) and, ideally, adaptive authentication.

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## Access management

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Access management uses information about your identification to determine which software suites you have access to and what you can do with them.

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## AWS identity and access management

It is simply AWS's IAM mechanism. AWS IAM allows you to create AWS users and groups and grant or deny them access to AWS services and resources.

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## Ash shell

The Almquist shell is a lighter version of bash shell.

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## Antivirus

Software protects systems from internal threats by detecting and detecting dangerous files and viruses.

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## Authentication Techniques

Authentication techniques such as Key Management, Two Factor Authentication, and Automated key Management It provide the ability to encrypt and decrypt without a centralized key management system and file protection.

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## ARP POISONING ATTACKS

ARP poisoning is an attack that deceives Computers or switches as to a system's true MAC address. The physical address, or hardware address, assigned to the NIC is known as the MAC address.

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## ARP Request

The Address Resolution Protocol (ARP) is a communication protocol for determining the link layer address associated with a given internet layer address, such as a MAC address.

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## Android architecture

It comprises many components to satisfy all the requirements of Android devices. An open-source Linux kernel with a set of C/C++ library

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## ARP Man-in-the-Middle Attacks

An attacker can reroute network data and, in some situations, introduce malicious code in a man-in-the-middle assault. Normally, communication from the user to the Internet passes through the switch directly to the router.

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## ARP DDOS Attacks

In a DoS attack, an attacker can also utilize ARP poisoning. An attacker could transmit an ARP response with a false MAC address for the default gateway.

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## Amplification Attacks

A sort of DDoS assault is an amplification ( ) attack. Greatly increases the quantity of traffic sent to or requested from a victim.

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## Amplification Attack Break Down

A ping is usually unicast, meaning it is sent from one computer to another. A ping sends ICMP echo queries to one computer and receives ICMP echo responses from the receiving machine.

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## Annual Loss Expectancy

Annual loss expectancy is a computation that helps you predict the expected monetary loss for an asset due to a specific risk over a single year. You can compute ALE as part of your company's quantitative cost-benefit analysis for any given investment or project idea.

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## Annualized Rate of Occurrence (ARO)

The annualized rate of occurrence (ARO) is defined as the probability of a threat occurring in a given year.

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## Annualized Rate of Occurrence Formula

The following formula is used to determine ALE:  
 $SLE \times ARO = ALE$   
If we know the value of ALE and SLE we can calculate ARO  
The formula to find ARO is:  $ARO = ALE/SLE$

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## ASSET VALUE (AV)

Asset valuation simply pertains to the process to determine the value of a specific property that is conducted usually when a company or asset is to be sold, insured, or taken over.

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## ASSET MANAGEMENT

Asset tagging is the process of placing physical identification numbers of some sort on all assets. This can be as simple as a small label that identifies the asset and the owner

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## Avoidance

Although often not possible, this is the easiest way of removing risk from a project. It involves the removal of the tasks that contain the risk from the project. Sometimes you can remove a small part of a project which carries a large risk factor.

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## Acceptance

Acceptance involves planning the risk into the project. If a better response strategy cannot be identified, accepting the risk might be sufficient to proceed with the project.

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## Air Gap

This means the device has no network connections and all access to the system must be done manually by adding and removing items such as updates and patches with a flash drive or other external device.

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## Attribute-Based Access Control

Grants or denies user requests based on arbitrary attributes of the user and arbitrary attributes of the object, and environment conditions that may be globally recognized

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## Active Defence

The deployment of offensive tactics to outwit or slow down a hacker and make hacks more difficult to carry out is known as active defence.

An active cyber defence strategy assists firms in preventing attackers from gaining access to their business networks.

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## Authentication

The sender and receiver's identities have been verified. The destination/origin of information is also confirmed.

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## Asymmetric Key Cryptography

A pair of keys is employed in this system to encrypt and decode data.

For encryption, a public key is used, while for decryption, a private key is utilized.

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## Analysis

Investigators piece together data fragments and develop conclusions based on the evidence uncovered.

It may, however, take several iterations of investigation to substantiate a single crime scenario.

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## Big Data Era

As the focus moves from how we collect data to how we handle that data in real-time, the Big Data Era is coming to an end. Big Data has evolved into a business asset that will enable multi-cloud support, machine learning, and real-time analytics in the future.

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## Buffer Overflows

A buffer overflow, also known as a buffer overrun, is a frequent software programming error that an attacker might use to obtain access to your computer..

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## Bootrom Exploit

A jailbreak bootrom may break all authentications at low levels such as file system, iBoot, and NOR (custom boot logos).

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## Backdoors

Usually created by software developers for an emergency entry into a system

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## Blue Keep

Blue Keep is a Microsoft RDP vulnerability that allows attackers to remotely log in to a victim's computer.

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## Business impact analysis (BIA)

A business impact analysis (BIA) is the process of assessing the criticality of business activities and the corresponding resource requirements in order to maintain operational resilience and continuity during and after a business disruption.

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## Business continuity planning

The process of developing a framework for preventing and recovering from potential risks to a corporation is known as business continuity planning (BCP).

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## Bash

Bash is a Unix shell and command language created by Brian Fox as a free software substitute for the Bourne shell for the GNU Project.

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## Bourne shell

The Bourne shell was one of the major shells used in early versions and became a de facto standard

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## Bashrc File

When a user signs in, the `.bashrc` file is executed as a script. The file itself contains a number of terminal session configurations. Coloring, completion, shell history, command aliases, and other features can all be set up or enabled in this way.

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## Background Processes

Background and do not require user involvement. As an example, consider antivirus software.

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## Birthday Attack

A birthday attack is a form of cryptographic attack that takes advantage of the probability theory mathematics underpinning the birthday problem. This assault can be used to manipulate two or more parties' communication.

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## Buffer Overflow

When an application receives more or different input than it expected, a buffer overflow occurs. As a result of the error, system memory that would normally be protected and inaccessible is exposed.

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## Blanket Purchase Agreement (BPA)

A Blanket Purchase Agreement (BPA) is a simplified method of filling anticipated repetitive needs for supplies or services by establishing "charge accounts" with qualified contractors.

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## Computer Forensics

Data from personal computers, laptops, and storage computing devices is collected, identified, preserved, and analyzed in computer forensics. Computer forensics experts are usually involved in investigations of computer crimes, although their services are also required in civil lawsuits and the data recovery process.

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## Cloud Carrier

A cloud carrier serves as an intermediary between cloud consumers and cloud providers, providing connectivity and transfer of cloud services.

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## Cross-functional team

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The team not only assists with ongoing oversight and maintenance, including technical control. Each team member should have clear responsibilities and objectives.

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## Communications Lead

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Leads the effort on messaging and communications

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## Commands and utilities

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There are a variety of commands and utilities that you can utilize in your daily tasks. Commands and utilities include cp, mv, cat, and grep, etc.,.

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## Crunch

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To crack a password, we must test a large number of passwords until we find the one that works. There is no guarantee that any of those millions of possibilities will work.

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## Cloud Security Alliance (CSA)

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Cloud Security Alliance is a not-for-profit organization with the mission to “promote the use of best practices for providing security assurance within cloud computing, and to provide education on the uses of cloud computing to help secure all other forms of computing.”

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## Creating a File

The touch command is used to create empty files. We can create multiple empty files by executing it once.

Command : Touch <file name>

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## Changing Permissions

To change the file or the directory permissions, you use the chmod (change mode) command.

Each permission is assigned a value, as the following table shows, and the total of each set of permissions provides a number for that set.

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## Changing Owners and Groups

While creating an account on Unix, it assigns a owner ID and a group ID to each user. All the permissions mentioned above are also assigned based on the Owner and the Groups.

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## chown

The chown command stands for "change owner" and is used to change the owner of a file.

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## chgrp

The chgrp command stands for "change group" and is used to change the group of a file.

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## Clicking Jacking

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Fooling people to click something else they believe they click. Attackers obtain sensitive information or take device control

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## Config Manipulation

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Apps can utilize external files and libraries, alter them, or influence the ability of apps to manipulate the settings.

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## Carrier-loaded Software

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Pre-installed software or apps on devices may be vulnerable to criminal actions, such as deleting, altering, stealing of device data, wake-up calling, etc.

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## Cold boot attack

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An attack method developed nearly a decade ago by Princeton University researchers who demonstrated the potential to recover disk encryption keys from random access memory (RAM) when the device's power is cycled in cooled or frozen temperatures.

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## Create phase

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Data will continue to be generated in the cloud and by remote users.

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### CSPs (Cloud Service Providers)

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Provide the actual cloud service to an Agency  
Must meet all FedRAMP requirements before they implement their services.

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### CIO Council

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Disseminates FedRAMP information to Federal CIOs and other representatives through cross agency communications and events

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### Compliance

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A Cloud Service Provider can submit the appropriate documentation to the FedRAMP PMO and to an agency which may grant an agency "Authority to Operate" (ATO).  
Using FedRAMP mechanisms, other agencies can

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### Cloud Pentesting

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Cloud Penetration Testing is a permitted simulated cyber-attack against a system that is hosted on a Cloud provider. Amazon's AWS

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### Configuration Management (CM)

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Configuration management (CM) is a systems engineering technique for ensuring that a product's performance, functional, and physical properties are consistent with its requirements, design, and operational data throughout its lifecycle.

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## Contingency Planning (CP)

In project management, a contingency plan is a specified, actionable plan that will be implemented if a recognized risk materializes. It's essentially a "Plan B" that's put in place when things don't go as planned.

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## Cross-site scripting (XSS)

A very common web application vulnerability that can lead to installation or execution of malicious code, account compromise, session cookie hijacking, revelation or modification of local files, or site redirection. There are three major types of XSS: reflected XSS, stored (persistent), and DOM-based XSS.

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## Concise

Content and complexity is relevant to the audience;  
No superfluous words or phrases

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## Consistent

Terms have the same meaning throughout the document; Items are referred to by the same name or description throughout the document; The level of detail and presentation style is the same throughout the document

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## Complete

Responsive to all applicable FedRAMP requirements; The Security Package Includes all appropriate sections of FedRAMP Template; the Security Package Includes all attachments and appendices

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## CVE (Common Vulnerabilities and Exposures)

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The Common Vulnerabilities and Exposures (CVE) dictionary is a collection of common names for publicly known information security flaws. CVE's standard IDs make it easier to communicate data between different network security databases and tools.

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## CVSS (Common Vulnerability Scoring System)

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CVSS is an open framework for conveying IT vulnerability characteristics and implications. Its quantitative technique enables consistent, precise measurement.

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## CWE (Common Weakness Enumeration)

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It is a method of identifying weaknesses in a group of people. CWE establishes a common vocabulary for discussing, identifying, and resolving.

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## Config Manipulation

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Apps can utilize external files and libraries, alter them, or influence the ability of apps to manipulate the settings.

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## Conduct Root Cause Analyses

Spend more time searching for root causes of equipment failures instead of engaging in temporary fixes.

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## Condition-Based Maintenance (CBM)

This maintenance strategy uses technology-based diagnostics—vibrations, temperature, pressure, speed,

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## Central identity management

IAM takes place in a single environment with centralized identity management. In a professional environment, this would entail a person logging into a single workspace to gain access to all of the programs and tools they require.

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## C shell

The C shell was developed by Bill Joy for the Berkeley Software Distribution. Its syntax is modelled after the C programming language.

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## Controlling Jobs

Job control is a command shell capability that allows many commands to be run and managed from a single shell instance. A parent shell forks a child process to run a command without job control, sleeping until the child process terminates.

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## Cybersecurity Risk Mitigation

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Because the potential of a cyber-assault is almost certain, proactive cybersecurity risk mitigation is increasingly becoming the only option for enterprises.

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## Cybersecurity Research

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Cybersecurity Research is the area that is concerned with preparing solutions to deal with cyber criminals.

With increasing amount of internet attacks, advanced persistent threats and phishing,

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## Clickjacking

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Users are tricked into clicking something other than what they think they're clicking by clickjacking.

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## Customer-based SLA

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Applies to all contracted services by a customer, a group of customers or the same business area.

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## Clean Desk Policy

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A clean desk policy instructs that all employees must clear their desks at the end of each work day. This not only includes documents and notes, but any post-it notes, businesses cards, and removable media (e.g. USB memory sticks).

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## Control plane

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This plane carries signaling traffic originating from or destined for a router.

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## Change Management

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All networks evolve, grow, and change over time. Companies and their processes also evolve and change, which is a good thing. But infrastructure change must be managed in a structured way so as to maintain a common sense of purpose about the changes.

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## Centralized model

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All desktop instances are stored in a single server, which requires significant processing power on the server.

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## Containerization

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Containerization is a technique in which the kernel allows for multiple isolated user space instances. The instances are known as containers, virtual private servers, or virtual environments.

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## Cloud Access Security Broker (CASB)

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A cloud security broker, or cloud access security broker (CASB), is a software layer that operates as a gatekeeper between an organization's on-premises network and the provider's cloud environment

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## Certificate Management

Certificate management is the process of managing digital security certificates. Certificate authorities are responsible for certificate management and serve as a registration authority for subscriber certificates.

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## Cryptography

Cryptography is the use of codes to secure information and communications. Only the individual to whom the information is directed can understand and process it.

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## Confidentiality

Only the individual for whom the information is meant has access to it, and no one else has access to it.

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## Digital Forensics

The process of preserving, identifying, extracting, and documenting computer evidence. It is the science of extracting information from digital media.

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## Digital Evidence

Any type of data stored and gathered from any electronic storage device is referred to as digital evidence. Wireless networks and random-access memory can also be used to recover digital evidence.

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## Documentation

This method necessitates the creation of a record of all visible data. It aids in the recreation and analysis of the crime scene. It entails photography, sketching, and crime-scene mapping, as well as adequate documenting of the crime scene.

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## Database Forensics

Database forensic experts look into any database access and report any changes to the data. Database forensics can be used to investigate large-scale financial crimes and verify business contracts.

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## Disk Forensics

The science of extracting forensic evidence from digital storage media such as hard disks, USB devices, CD, DVD, Flash drives, and floppy disks is known as disk forensics.

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## Disk analysis

Analysts that specialize in disk forensics ensure that all pertinent data is retrieved, processed, and presented as evidence.

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## Directories

Directories are used to organize both unique and common files.

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## Data Caching

Caching in mobile devices used to interact with web apps, attackers attempt to exploit the data caches

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## Destroy phase

Furthermore, we would need to delete data from the production process and then sanitise the media.

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## Digital Authentication

The process of establishing confidence in user identities presented digitally to a system, which was previously referred to as Electronic Authentication (E-Authentication)

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## Dynamic Runtime Injection

Attackers handle and misuse a program to overcome security locks, logic checks, rights access sections of the app, and rob data Runtime Injection.

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## DNS Poisoning

Attackers utilize DNS servers, forward website users to another attacker's website DNS Poisoning.

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## Data Centers

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A data center is a physical location where businesses keep their mission-critical programs and data. The design of a data center is built on a network of computer and storage resources that allow shared applications and data to be delivered.

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## Data Dumping

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A memory dump (sometimes called a core dump or system dump) is a snapshot of computer memory data taken at a certain point in time. A memory dump can contain important forensic information about the condition of the system prior to an

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## Dr.Fone

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Dr. Fone was the first company in the world to offer iOS and Android data recovery software, and it has saved a lot of people. With over a decade of expertise providing top-rated software and services to individuals,

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## Denial-of-Service

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Denial-of-Service (DoS) attacks prevent a company or organization from using its own resources. In a typical DoS attack, the culprit floods the target network with invalid authentication requests or pings.

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## Database models

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Describes relationships between data elements  
Used to represent the conceptual organization of data  
Formal methods of representing information

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## Distributed Database models

Client-server type of DB located on more than one server distributed in several locations  
Synchronization accomplished via a two-phase commit or replication methods.

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## Data dictionary

A Data Dictionary is a list of names, definitions, and properties for data elements in a database, information system, or research project.

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## Data Marts

Often regional collection of information from databases.

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## Data Warehouse

A data warehouse is a sort of data management system that is intended to facilitate and assist business intelligence (BI) and analytics activities. Data warehouses are designed mainly for querying and analysis, and they frequently store vast

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## Data mining

Data mining is a technique for extracting and detecting patterns in huge data sets that combines machine learning, statistics, and database systems.

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## Data Portability

The ability to transfer data from one system to another without being required to recreate or re-enter data descriptions or to modify significantly the application being transported.

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## Degrees Monitoring (DLP)

Which involves looking at data as it exits the production environment. These are commonly referred to as DLPs.

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## DNS Poisoning

Attackers utilize DNS servers, forward website users to another attacker's website DNS Poisoning.

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## Database scanners

Database vulnerability scanners identify the weak points in a database so as to prevent malicious attacks

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## Data Security on Wireless Networks

Identify a wireless network within close proximity is a wireless-enabled computer. There is no way to intentionally hide your networks.

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## Data Encryption

WPA and WPA2 are both viable options, but longer and more complicated passwords give better security

If You are putting your business or personal data at risk, encryption should be considered necessary.

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## Disaster recovery strategy

A disaster recovery plan (DRP), also known as a disaster recovery implementation plan or an IT disaster recovery plan, is a documented policy and/or process that helps an organization execute recovery processes in the event of a disaster.

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## Dash shell

The Debian Alquist Shell is the default shell script in Ubuntu.

While bash is the default login and interactive shell, dash is used to run system processes because it's much lighter than bash.

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## Data Caching

Caching in mobile devices used to interact with web apps, attackers attempt to exploit the data caches

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## DNS Attacks

DNS is a service that converts host names to IP addresses.

Users will no longer need to remember web site IP addresses as a result of this.

Reverse lookups are also available through DNS.

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## DNS Poisoning Attacks

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DNS poisoning is a type of attack that tries to change or corrupt DNS results. The rogue website's IP address is returned by the DNS server.

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## DDoS DNS Attacks

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Individual systems are forced to become bots within huge botnets by Mirai. They transmitted commands to millions of infected devices. It was instructing them to send queries to DNS servers over and over again.

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## Dictionary Attacks

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One of the first password assaults was a dictionary attack. It makes use of a word dictionary and tries every word in it to check if it works. A dictionary is essentially a list of words and letter combinations in this context.

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## Domain Hijacking

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An attacker changes the registration of a domain name without the owner's permission in a domain hijacking assault. Social engineering tactics are frequently used by attackers to get illegal access to the domain owner's email account.

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## Driver Manipulation

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Drivers are used by operating systems to interact with hardware and software components. An application may need to support an older driver on occasion.

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## DLL Injection

A DLL is a compiled set of code that may be used by a program without having to recreate it. Most programming languages, for example, include math-based DLLs.

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## Data Ownership Policy

The act of holding legal rights and total control over a single piece or set of data pieces is referred to as data ownership. It establishes and gives information on the legitimate owner of data assets, as well as the data owner's acquisition, use, and distribution policies.

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## Data plane

Also known as the forwarding plane, this plane carries user traffic.

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## Data Security

Throughout its lifecycle, data security refers to the process of securing data from illegal access and data corruption. Data encryption, hashing, tokenization, and key management are all data security strategies that safeguard data across all applications and platforms.

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## Dissemination

Intelligence and Security Informatics has more information. This refers to the active dissemination and dissemination of all types of information to the users or audiences that deserve it.

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## Digital Certificate

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A digital certificate is a file that contains a variety of data, including identifying information, a serial number, and expiration dates. It also contains the digital signature of the certificate authority that issued the certificate.

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## Email Forensics

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Analysts that specialize in email forensics extract valuable information from emails. Senders and receivers, the content of the messages, time stamps, sources, and metadata are all examples of this information.

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## Evasi0n7

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Evasi0n7 is an iPhone, iPod touch, iPad, and iPad mini devices running iOS 7.0 to 7.0.6 is suitable as a junk tool (Devices that have been updated Over the Air [OTA] should be restored with iTunes first).

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## Evidence Collection

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When it comes to tracing the attacker and comprehending the attack's procedure, evidence collecting is important. As a result, incident responders should know where to look for evidence and how to gather it.

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## Escalated privileges

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Attackers engage in escalation privilege assaults that take advantage of design flaws, programming mistakes, bugs, etc.

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## Electricity

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The movement of electrical power or charge is referred to as electricity. Electricity can be generated using renewable or non-renewable energy sources, yet electricity is neither renewable nor non-renewable.

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## Eavesdropping

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Eavesdropping attacks are comparable to sniffing attacks, but they're usually more passive, easier to conduct out. An attacker listens to data travelling between networks in order to obtain private information.

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## Eavesdropping attacks

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Involve a weaker link between the client and the server, allowing the attacking entity to transfer network traffic to itself. Tools used to carry out these attacks include Wireshark, tcpdump, and Ettercap.

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## Encryption

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Encoding data to hide it from anyone who isn't authorized to see it. A decryption key can be used to access or decrypt encrypted data.

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## Evil Twin

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Attackers obtain a wireless access point and configure it to function as the current network. One of the simplest methods to prevent evil twins from stealing your organization's information is to use data encryption.

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## Employers Background Checks

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Background checks assist you in assembling a team you can rely on, while also limiting risk and safeguarding your company's brand.

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## Exit Interview

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An exit interview is a survey that is undertaken with an employee when he or she departs a company.

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## Extranet

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A category describing the strength of the authentication process.

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## Electronic Identity

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A publicly available digital certificate that includes a public key and a private key. When used together, this acts like a digital passport: it may be used to confirm the identification of a person or service.

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## Forensics Data analysis

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Structured data is analyzed in this branch of forensics. The primary role of data analysts is to investigate financial crimes and fraud.

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## Forensic Analysts

Forensic analysts are in charge of gathering and/or analyzing crime scene evidence in order to learn more about the perpetrator or to include or exclude a certain person as a potential suspect.

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## Files and Directories

Organize all of Unix's data into files. After that, all of the files are arranged into directories

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## File Editor

The nano command is use to edit text files.  
Command: nano <file name>

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## File Permission / Access Modes

File ownership is an important feature of Unix that allows for safe file storage. Owner permissions dictate what activities the file's owner is allowed to take on the file.

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## Firewall

A firewall is a network security device that monitors incoming and outgoing network traffic. Also allows or disallows data packets according to a set of security rules.

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## Firewall Types

- Software or hardware firewalls Jailbroken iPhones
- Packet-filtering firewalls Mobile Malware
- Next-generation firewalls (NGFW)
- Proxy firewalls
- Network address translation (NAT) firewalls

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## Filter Table

Filter is default table for iptables. So, if you don't define you own table, you'll be using filter table.

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## Framing

Website combined with iFrame components in HTML in another webpage  
Drive By Downloading: unintentional Internet download of software. This exploit affects Android

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## FIDO Alliance

FIDO Authentication enables password-only logins to be replaced with secure and fast login experiences across websites and apps.

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## Formal methods developed

Formal methods are mathematical entities that are used to model complex systems. Designers can not only validate the system's attributes in a more thorough manner but also use mathematical proof.

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## Foreign Keys

Foreign keys are structured as a shared component in a database that connects two tables. A foreign key must always relate to another primary key.

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## File

A file is a computer object that holds data, information, settings, or commands that are utilized with a software.

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## Fedramp

It is a government-wide program that provides a standardized approach to security assessment, authorization, and continuous monitoring for cloud products and services.

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## Fedramp Needed

The Federal Government spends hundreds of millions of dollars a year securing the use of IT systems. Cloud solutions allow for faster processing.

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## FedRAMP Program Management Office

Established within the GSA and responsible for the development of the FedRAMP program.

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## FIPS 199

FIPS 199 mandates that federal agencies evaluate their information systems in terms of confidentiality, integrity, and availability, assigning a low, moderate, or high impact rating to each system in each category.

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## FedRAMP Assignments

The assignments are also documented in the "Parameter" sections of the Control Summary Information following the requirements. When multiple requirements are presented as in the case with AC-2 objective (f)

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## Factors that can affect RPO

Maximum tolerable data loss for the specific organization, Industry-specific factors—businesses dealing with sensitive information such as financial transactions or health records must update more often, Data storage options, such as physical files versus cloud storage, can affect speed of recovery,

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## Fish shell

This friendly interactive shell was written from scratch and isn't derived from any of the other shell families. It's intended to be user friendly. Amongst its many other perks, fish offers suggestions for commands based on your history and the contents of the current folder, similar to predictive text.

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## Foreground Processes

They run on the screen and require user input. For example Office Programs

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## Facilitate communication

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The service desk team or the service provider know the customer's expectations.

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## Federation

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A federated identity is a portable identity that can be used across businesses and domains.

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## Goals of Fedramp

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Accelerate the adoption of secure cloud solutions through reuse of assessments and authorizations  
Increase confidence in security of cloud

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## Governance

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The governance of FedRAMP is comprised of different executive branch entities that work in a collaborative manner to develop, manage, and operate the program.

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## General Services Administration (GSA)

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The GSA is in charge of collecting, storing, distributing, and disposing of personal property and supplies, as well as real estate acquisition, management, and disposal.

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## Honey trap

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In this assault, the social engineer disguises himself as an attractive person in order to engage with a person online, create an online relationship, and acquire sensitive information through that interaction.

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## Hierarchical Database models

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A hierarchical database is a data architecture in which data is organized into a tree-like structure, or parent-child structure, in which one parent node can have numerous child nodes connected through links.

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## Host-based scanners

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Host-based vulnerability scanners are used to locate and identify vulnerabilities in servers, workstations, and other network hosts. It also provides further visibility into the scanned systems' configuration settings and patch history.

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## Host Based IDS

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HIDS tools monitor the log files generated by your applications, creating a historical record of activities and functions allowing you to quickly search them for anomalies and signs an intrusion may have occurred.

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## Hydra Password Attacks

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Hydra is a parallelized password cracker that can attack a variety of protocols. It's quick and adaptable, and adding new modules is simple. Researchers and security consultants can use this program to demonstrate how simple it is to acquire unauthorized remote access to a system.

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## Hosted model

Desktops are maintained by a service provider. This model eliminates capital cost and is instead considered operational cost.

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## Honeypot

A honeypot is a security technique that generates a virtual trap in order to entice intruders. A purposely infiltrated computer system allows attackers to exploit weaknesses, allowing you to research them and enhance your security measures.

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## Hash Functions

A hash value with a fixed length is calculated based on the plain text, making it impossible to reconstruct the plain text's contents. Many operating systems encrypt passwords using hash algorithms.

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## Identification

In the forensic process, it is the initial stage. What evidence is present, where it is held, and how it is stored are all part of the identification process. Personal computers, mobile phones, and personal digital assistants (PDAs) are examples of electronic storage medium.

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## Incident Response

Incident response, also known as IT incident, computer incident, or security incident. It is a structured way to dealing with and managing the consequences of a security breach or cyberattack.

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## Importance of Incident Response

Most businesses rely on sensitive information. Simple malware infections to unsecured employee laptops. Any of these situations can have both short- and long-term consequences.

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## Incident Response Team

Incident response team (CSIRT) assists in reducing the impact of security risks by responding quickly and effectively. Due to the increasing amount of security risks, companies must have a specialized incident response team to deal with them.

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## Incident response team Responsibilities

- create and maintain an IR plan
- Analyze the security incident
- Manage internal communications and alerts
- Offer easy communication with stakeholders
- Recommend tools, technologies, policy, and governance after the incident

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## Incident Response Manager

In the detection, analysis, containment, and recovery stages, he monitors the entire process and assigns priorities to the various activities.

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## Incident Response Plan Management

The response to an incident is similar to any other component of information security. To be adequately measured, it takes careful planning, continual management, and defined metrics.

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## Indicators of Compromise (IOC)

These detect potentially malicious behaviour on a system or network  
Information security and IT workers can use indicators of compromise.

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## Incident Response Tools

- SIEM (Security information and event management)
- Intrusion Detection Systems (IDS)
- Netflow Analyzers
- memdump

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## Intrusion Detection Systems (IDS)

If a server, a host-based intrusion detection system (HIDS), or a network-based intrusion detection system detects suspicious behavior or known assaults, the system will send an alert to the appropriate party (NIDS).

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## IP TABLES

Packet filtering and NAT rules are managed by the iptables firewall.  
IP Tables is included in every Linux distribution.

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## Infecting the device

Mobile spyware infects the device on Android and iOS smartphones differently.

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## Infection with iOS

iOS requires physical mobile access. A null-day operation like the JailbreakME hack can also infect the device.

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## Interoperability

The capability to communicate, to execute programs, or to transfer data among various functional units under specified conditions

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## Installing a backdoor

For installing the backdoor, the rooting of Android devices and Apple jailbreakings requires admin access.

Despite rooting/jamming methods by device makers, mobile spyware may simply overcome them.

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## Improper SSL validation

Security Laps in applications The process of SSL validation can allow attackers to bypass data security

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## iOS Jailbreaking

Jailbreaking controls the iOS system used on Apple devices, the symmetry of rooting of Android devices in simple language.

It removes the device from Apple source dependencies and allows you to utilize non-existent third-party programs from the official app store.

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# IRoot

Like Root Genius, iRoot has been built by Chinese folks for another strong root program. You can manage your Android phone or tablet only one click away.

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# ios Device Hacking

Mobile Apple's operating system iOS operates devices including the iPhone, iPad and iPod Touch. Originally called the iPhone OS, with the launch of the iPad, the moniker was changed to iOS. The iPad has had a different OS

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# iBoot Exploit

A jailbreak iBoot permits access to the file system and level iboot. If a fresh boot-rom is in place, this sort of exploit can be semi-tethered.

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# Intrusion detection

It search the network for indicators of compromise or an ongoing attack and alert the user if malicious behavior is discovered. Monitoring and detecting when a threshold is crossed is the most popular intrusion detection approach.

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# Inheritance

Objects inherit attributes and behaviors from super class

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## Identity Management

Identity management is the method of associating user rights with a given identity to grant individuals access to system services.

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## Input validation

Input validation ensures that only properly formed data enters an information system's process, preventing flawed data from remaining in the database and causing downstream components to malfunction.

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## Initial

Development based on Ad Hoc effort. No procedures in place and there is no assurance of consistency; thereby affecting software quality.

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## Interoperability

The capability to communicate, to execute programs, or to transfer data among various functional units under specified conditions

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## IOT Devices

IoT is an Internet-connected gadget which can interact with other devices and networks. Depending on their design and functions, these gadgets may do a wide range of activities.

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## Identification of vulnerabilities

Vulnerability scanning is the most common method of detecting flaws, and the effectiveness of a scanner is determined by two factors: The scanner's capacity to discover and identify devices, software, and open ports, as well as acquire other system data

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## IEEE 802.11b-1999 (802.11b)

This technology supports up to 11Mbps transmission and is backward compatible.

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## IEEE 802.11g-2003 (IEEE 802.11g)

This is a popular technology that offers up to 54Mbps and a range of 150 feet.

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## IEEE 802.11n-2009 (IEEE 802.11n)

This technology seeks to improve throughput in the 2.4GHz to 5GHz frequency band. It employs several antennas, which boosts data speeds.

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## inSSIDer

inSSIDer is comparable to the old Net Stumbler tool, except that it has been updated and works with Windows XP, Vista, and Windows 7. The program detects wireless networks and reports on their kind, maximum transfer rate, and channel utilization.

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## IP addresses

The Internet Protocol (IP) is a set of standards and specifications for producing and transferring data packets, or datagrams, across networks. The Internet Protocol (IP) is a component of the Internet protocol suite's Internet layer.

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## Impact of Incidents

The impact and immediacy of an incident are frequently used to evaluate its priority. The term 'Impact' refers to the scope of the Incident as well as the potential damage caused by the Incident before it can be remedied.

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## Improve PM Processes

An effective PM program can drastically increase MTBF

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## Identity and Access Management

Ensuring the right people and job responsibilities (identities) in a company have access to the resources they need to execute their duties Identity and access management solutions allow your organization to manage a variety of identities.

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## iBoot Exploit

A jailbreak iBoot permits access to the file system and level iboot. If a fresh boot-rom is in place, this sort of exploit can be semi-tethered. This is used mostly for reducing iOS controls at low level.

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## Identity management

Identity management ensures that you are who you say you are and stores information about you. An identity management database stores information about your identity.

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## Integrate Overflow

An integer overflow attack tries to use or produce a numeric value that an application can't handle. As a result, the application produces incorrect results.

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## Improve the service provided

Reduced incident resolution or request delivery times

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## Identify the hazards

The first step to creating your risk assessment plan is determining what hazards your employees and your business face

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## Intranet

An intranet is a private network within a corporation that allows employees to safely communicate information.

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## Identity and Access Management

Ensuring the right people and job responsibilities (identities) in a company have access to the resources they need to execute their duties. Identity and access management solutions allow your organization to manage a variety of identities, such as people, software, and hardware.

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## Integrity

Information cannot be updated in storage or during the transfer between the sender and the intended receiver without any modification to the information being detected.

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## Jump Bag- Forensic Toolkit

Response times should be as short as feasible when an issue occurs. As a result of every minute that passes, a danger artifact is lost, or the attackers cause additional harm.

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## Jump Bag

Response times should be as short as feasible when an issue occurs. As a result of every minute that passes, a danger artifact is lost, or the attackers cause additional harm.

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## Jamming

The goal of jamming (also known as network interference) is to interrupt the network. Interference is almost unavoidable due to the wireless characteristics.

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## John the ripper

It is a fantastic program for breaking passwords. Well-known brute-force techniques such as dictionary and bespoke wordlist attacks. It can also be used to crack hashes or passwords for zipped or compressed data, as well as locked files.

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## Job rotation

A policy that requires employees to rotate into various jobs, or at least rotate some of their responsibilities. It provides numerous advantages for both the person and the organization.

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## Jump box

A jumpbox, or jump server, is a server that is used to access devices that have been placed in a secure network zone such as a DMZ.

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## Known Plaintext Attacks

If an attacker obtains samples of both the plaintext and the cipher text, he can execute a known plaintext assault. Attacker can use the same decryption procedure on other cipher text if he succeeds.

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## Lead Investigator

Collects and analyses all evidence  
Implements rapid system and service recovery.

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# LINUX+

The UNIX operating system is a collection of applications that serve as a conduit between the user and the computer.

Kernel is a set of computer programs that distribute system resources and coordinate all aspects of the computer's internals.

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# ls

You can use the ls command to list out all the files or directories available in a directory.

Command: ls

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# Linux Kernel

The core of the Android architecture is Linux Kernel.

It manages all drivers accessible, such as Display controls, Camera ports, etc.

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# Leveraging and Authorization

Shows the architecture, including the domain architecture, with the existing domain hierarchy, names, and addressing scheme; server roles; and trust relationships.

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# Logical deployment diagram

The process or action of confirming an identity used to interact with or log in to an information system.

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## Mobile Device Forensics

Data can be recovered from smartphones, SIM cards, mobile phones, GPS devices, tablets, PDAs, and gaming consoles by specialists in this sector. This type of analysis is needed to recover audio and visual data, contacts, and call logs from devices used as evidence in court.

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## Malware Forensics

This branch's experts identify, analyse, and investigate various malware types in order to track down culprits and causes for the attack. They also assess the extent of the damage produced by the attack and identify the malware's code.

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## Memory Forensics

Live acquisition is another term for this form of digital forensics. The data is retrieved from RAM. Hackers can now leave no traces on hard drives thanks to recent advancements in cybercrime technology.

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## Malware infections

Malware can infiltrate your computer by exploiting known software flaws. A vulnerability is a flaw in your program that allows malware to get access to your computer. When you visit a website

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## Mangle Table

Iptables's Mangle table is for specialized packet alteration. This alters QOS bits in the TCP header.

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## memdump

The memdump plugin is run against the memory image, with the output directed to the home folder

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## Multi-Tenant Security

Multi-tenancy is a software architecture that uses a single application to serve multiple customers. By using multi-tenancy, you can create one application and then deploy it to as many customers as you want.

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## Mobile Application Attack Vectors

An Attack Vector is defined as a process or technique used by a hacker to enter another device or network, to inject a so called 'bad code' which is usually termed payload. This vector enables hackers use system faults

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## Man in the Middle

Attacker implants malicious code on victim's mobile device  
An attacker has connections between two systems across the current network

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## Message replay

Usage of recorded data at a later period than intended in order to repeat an action that benefits the attacker. Such as the capture and replay of an instruction to transfer funds from a bank account under the attacker's control.

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## Message manipulation

Changing a packet header address to route it to an unexpected destination or modifying user data are examples of message manipulation.

## Masquerade attacks

Masquerade attacks involve an entity adopting a false persona in order to get or manipulate information.  
As a result, gain unjustified privilege status.

## Manage patch application

A solid patch management policy will include regular tracking of patch releases for all software.

## Misuse Detection

These systems that look for a signature or defining characteristic of an attack.

## Masking

Hiding the data with useless characters; for example, showing only the last four digits of a Social Security number: XXX-XX-1234.

## Metadata

“Data about data” gives the data its meaning/context

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## Mobile Device Security

Mobile Device Security refers to the safeguards put in place to protect sensitive data kept on and transferred by laptops, smart phones, tablets, wearable's, and other portable devices.

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## Monitoring and Reporting

Discovering and monitoring the virtual resources, monitoring cloud operations and events, and generating performance reports

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## Mitigating Controls

As stated in the definition, mitigating controls are procedures employed to lessen the overall impact of a danger. As a result, the mitigating controls are assigned to the appropriate dangers.

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## Monitor Baseline

Assessment and mitigation cannot entirely protect it. It's impossible to fix every system or eliminate every application flaw right away. Even if this were possible, users would continue to do things that permitted dangerous code to be installed on their systems.

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## Monitoring

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Packet capture and export of data to text files for further processing by third party tools

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## Mobility

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Users of wireless networks can connect to existing networks and then roam freely. Because the phone connects the user via cell towers, a mobile phone user can travel kilometers in a single call.

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## MAC address

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A unique identification assigned to a network interface controller (NIC) for use as a network address in communications inside a network segment is known as a media access control address (MAC address).

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## Mean Time between Failures (MTBF)

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Mean time between failures (MTBF) is a prediction of the time between the innate failures of a piece of machinery during normal operating hours. MTBF helps businesses understand the availability of their equipment.

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## Mean Time to Repair (MTTR)

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Mean time to repair (MTTR) is a maintenance metric that calculates the average amount of time required to troubleshoot and repair faulty equipment. It reflects how rapidly an organization can respond to and repair unplanned breakdowns.

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## MTTR formula

(Total corrective maintenance time/ Number of repairs)  
=MTTR

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## Multi- factor authentication

When you use multi-factor authentication, your IAM provider requires more than one type of proof that you are who you say you are. A common example is the requirement of both a password and a fingerprint.

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## Monitoring and Managing Processes

When a system boots, the kernel launches a software called init. init executes shell scripts that launch all system services. Some of them merely run in the background and have no user interface. They are called to as daemon processes.

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## Man-in-the-Browser

It is a form of proxy Trojan horse that infects web browsers that are vulnerable. Browser session data can be captured by successful man-in-the-browser attacks.

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## Memory Leak

A memory leak is a flaw in a computer program that leads it to consume more and more memory as time goes on. The application can take so much memory that the operating system fails in the worst-case scenario.

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## Multilevel SLA

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Combines service and customer SLA, and applies at a corporate level for all users in an organization too. Multilevel SLAs avoid duplication and incompetence between several agreements, making it possible to integrate several conditions into the same system.

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## Malvertising

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The act of incorporating malicious ads on trusted websites, which results in users' browsers being inadvertently redirected to sites hosting malware.

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## Malware

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A computer program that is covertly placed onto a computer with the intent of compromising the privacy, accuracy, or reliability of the computer's data, applications, or operating system.

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## Metasploit

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One of the most popular exploitation frameworks.

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## Mutual agreement.

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The SLA is mutually accepted by the customer and the service provider.

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## Memorandum of Understanding (MOU)

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A memorandum of understanding is an agreement between two or more parties outlined in a formal document.

It is not legally binding but signals the willingness of the parties to move forward with a contract.

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## Mandatory Vacations

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Mandatory vacation regulations, like work rotation, serve as a disincentive to fraud.

Many companies will have a policy requiring employees in sensitive positions to take five or ten days off in a row.

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## Monitor and Prepare

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Similar to accepting the risk, this response can be used for major risks that carry a high probability and/or severity, but must be accepted by the project.

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## Mitigation

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Since risk is a function of probability and severity, both of these factors can be scrutinized to reduce the risk of project failure.

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## Multifactor Authentication (MFA)

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Multifactor Authentication (MFA) uses a password and a code delivered to your smartphone to authenticate yourself is a frequent form of multifactor authentication.

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## Mandatory Access Control

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In mandatory access control (MAC), subject authorization is based on security labels.

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## Manual Review

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Privileged accounts, regardless of the authentication method or architecture, must be monitored to ensure that these additional rights are not abused.

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## Monitoring and Logging

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Monitoring, also known as application supervision, is the ability to have a global view of an application at any one time as well as a history of prior states for numerous elements:  
Performance and response time of various server resources.

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## Network Forensics

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The goal of network forensics is to track, record, and analyse all network activity.  
In the event of security breaches, cyberattacks, or other cyber incidents, network specialists examine traffic and activities.

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## Netflow Analyzers

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Actual traffic across border gateways and within a network is examined in this study. A specific thread of activity may be tracked using Net flow, as can the protocol utilized on your network or the assets that are talking with one other.

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## New Directory

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The mkdir command is used to create a new directory under any directory.  
Command: Mkdir <name>

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## nano

©Certcop

Blue Team

The nano command is use to edit text files  
Command: Nano <file name>

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## Next-generation firewalls (NGFW)

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NAT gates hide individual IP addresses. As a result, attackers scanning a network for IP addresses are unable to collect detailed details. In the same way that proxy firewalls function as an intermediate between a group of computers and outside traffic, NAT firewalls do the same.

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## NAT Table

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NAT table is essential for your internet connection. The network address translation (NAT) table is responsible for allowing devices on a private network to connect to a public network, such as the internet.

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## Network Based IPS

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It examines network traffic to identify threats that generate unusual traffic flows, such as distributed denial of service attacks, specific forms of malware and policy Violations

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## No encryption / faint encryption

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Unsecured or weakly encrypted data transmission applications are capable to attack, for example hijacking session

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## Network Based Attacks

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Network-based attacks aim to compromise network security by intercepting and altering network traffic or spying on it. These can be active assaults, in which the hacker alters network activity in real time

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## National Institute for Standards and Technology (NIST)

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Advises FedRAMP on FISMA compliance requirements and assists in developing the standards for the accreditation of independent 3PAOs

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## Network Based IDS

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A network-based intrusion detection system (NIDS) is used to monitor and analyze network traffic to protect a system from network-based threats.

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## NIDS: OSSEC

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OSSEC is the world's most popular open-source host-based intrusion detection system (HIDS).

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## Network-based scanners

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On wired or wireless networks, network-based vulnerability scanners discover potential network security assaults and vulnerable systems. Network-based scanners help determine if there are unknown perimeter points on the network.

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## Netsparker

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Netsparker is an automated, yet fully configurable, web application security scanner that allows you to scan and identify security flaws in websites, web applications, and web services.

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## Nikto

©Certcop

Blue Team

Nikto is a free command-line vulnerability scanner that looks for dangerous files/CGIs, outdated server software, and other issues on web servers. It runs generic and server-specific checks.

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## Network devices

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In a wireless mesh network, a network device is a node. It can send and receive wireless HART data, as well as execute the fundamental network formation and maintenance activities. Field devices, router devices, gateway devices, and mesh handheld devices are examples of network equipment.

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## NMAP

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Nmap, or Network Mapper, is a free and open source network discovery and security auditing application. Use it for activities like network inventory, service upgrade schedule management, and monitoring host or service uptime.

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## Next Generation Firewall

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Next Generation Firewall that offers security intelligence to enterprises and enable them to apply best suited security controls at the network perimeter are also being worked on.

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## Non-Disclosure Agreement

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A non-disclosure agreement (NDA) is a legally binding contract that creates a confidential connection. The party or parties signing the agreement agree that sensitive information will not be shared with anyone else.

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## Network Architecture

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The way network devices and services are arranged to serve the connectivity demands of client devices is referred to as network architecture. Switches and routers are common network hardware.

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## Non-repudiation

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The creator/sender of information cannot later deny his or her intention to convey information.

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## Network based point

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It examines network traffic to identify threats that generate unusual traffic flows, such as distributed denial of service attacks, specific forms of malware and policy Violations

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## New Directory

©Certcop

Blue Team

The mkdir command is used to create a new directory under any directory.  
Command: Mkdir <name>

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## Objectives of Computer Forensics

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It helps to recover, analyze, and preserve computer and related materials in such a manner that it helps the investigation agency to present them as evidence in a court of law.  
It helps to postulate the motive behind the crime and identity of the main culprit.

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## Ordinary Files

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An ordinary file is a file that holds data, text, or program instructions on a computer system.

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## OUTPUT chain

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The output-chain command functions similarly to the next filter term in that it allows several levels of filtering on the interface in both the ingress and egress directions.

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## Obfuscation

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The term "obfuscation" refers to the use of any of these techniques to make data less relevant, detailed, or readable in order to protect the data or the data's subject.

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## Object oriented technology

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Keeps track of objects and entities that contain both data and action on the data  
Designed for non-text data such as graphics, video and audio clips  
A DB in which the operations carried out on data objects are considered part of their definition

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## Optimized

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Integrated plans for continuous process improvement.

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## Ongoing Assessment & Authorization

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Once an authorization is granted, ongoing assessment and authorization activities must be completed to maintain the security authorization.

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## Office of Management and Budget Policy (OMB)

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The governing body that issued the FedRAMP policy memo which defines the key requirements and capabilities of the program

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## OBJECTIVES OF THE SSP

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The SSP is the main document in which the CSP describes all the security controls in use on the information system and their implementation.  
Provides a global view of how the system is structured

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## OpenVAS

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OpenVAS is a vulnerability scanner with a lot of features. Unauthenticated and authenticated testing, different high-level and low-level internet and industrial protocol.

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## OpenID Connect (OIDC)

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OIDC is a newer open standard that allows users to log in to their applications using an identity provider. It is extremely similar to SAML, however it is built on the OAuth 2.0 standards and uses JSON to communicate data rather than XML, like SAML does.

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## Onboarding

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When a new employee joins a company, the onboarding process is defined as the person's first encounter with the company. As a result, you may assess whether the employee will continue with the company for a longer period of time in the first few days.

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## Preservation

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Data is segregated, safeguarded, and preserved during this phase. It includes restricting people from utilizing the digital device in order to prevent tampering with digital evidence.

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## Presentation

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The process of summarization and explanation of conclusions is completed in this final step. It should, however, be written in layman's words with abstracted terminologies. The precise details should be referenced in all abstracted terms.

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## Protect in Phases of the Incident Response

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Developing and implementing suitable safeguards for better delivery of critical infrastructure services

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## passwd

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Passwords are required on all Unix systems to ensure that your files and data remain private and that the system is safe from hackers and crackers. The steps to changing your password are as follows:

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## Permission Indicators

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While using ls -l command, it displays various information related to file permission as follows

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## Packet-filtering firewalls

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It examines packets and prevents them from passing if they do not comply with a set of security rules. The source and destination IP addresses of packets are checked by this form of firewall.

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## Platform vulnerabilities

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Blue Team

Exploiting vulnerabilities in the OS, Server software, or app modules running on the web server

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## Performance Audit

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Blue Team

Systematic evaluation of a cloud system by measuring how well it conforms to a setoff established performance criteria

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## Platform Libraries

©Certcop

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The Platform Libraries comprises several fundamental C/C++ libraries and Java-based libraries, such Media, Graphics, Surface Manager, OpenGL etc.

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## Pangu

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The Pangu team comprises a number of prominent security scientists and focuses on mobile security research.

Team Pangu aggressively shares expertise and research with the community at well-known security conferences such as BlackHat, CanSecWest and Ruxcon.

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## Passive Network Threats

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The passive attack is defined by the unmodified interception of messages.

The network data and systems are unaffected.

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## Packet Filtering

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Allowing traffic only to certain port numbers.

Packet filtering refers to a firewall examining packet addresses and port numbers.

It ensure that traffic from IP addresses known to be "evil" is kept out.

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## Project Initiation

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Decide on conceptual definition of project  
Identify security requirements  
Perform an initial risk analysis (analyze potential threats)

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## Polymorphism

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Capability of different objects to respond differently to same message

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## Platform Libraries

©Certcop

Blue Team

Platform Libraries comprises several fundamental C/C++ libraries and Java-based libraries, such as Media, Graphics, Surface Manager, OpenGL etc.

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## Phishing

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When a malevolent entity sends a fraudulent email masquerading as a real email, frequently from a trustworthy source. The message's purpose is to dupe the receiver into disclosing financial or personal information or clicking on a link that installs malware.

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## Privacy Threshold Analysis (PTA)

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A Privacy Threshold Analysis (PTA) is a questionnaire used to determine:  
If an information technology system contains Personally Identifiable Information (PII),

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## Privacy Impact Analysis (PIA)

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A privacy impact assessment (PIA) is a tool for detecting and assessing privacy concerns throughout a program's or system's development life cycle.

A privacy impact assessment explains what personally identifiable information (PII) is gathered and how that information is preserved, secured, and shared.

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## Platform vulnerabilities

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Exploiting vulnerabilities in the OS, Server software, or app modules running on the web server

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## Penetration Testing

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You can carry out penetration tests against resources on your AWS account per the policies and guidelines at Penetration Testing.

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## Persistent Threats

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Attacks exploiting security vulnerabilities for financial gain and criminal agendas continue to dominate headlines.

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## Prioritization

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Vulnerability and security configuration assessments can result in lengthy remedy task lists, which must be prioritized.

It is often find that a high proportion of systems have many vulnerabilities and security configuration problems.

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## Packet Sniffing

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Networks are intended to facilitate and expedite information traffic. To do this, information is delivered in packets over both wired and wireless networks.

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## Productivity in iam

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When you log in to your primary IAM portal, your employee no longer has to worry about having the correct password or access. Not only does every person have access to the best tools for their task.

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## Provisioning/de-provisioning users

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Provisioning refers to the process of specifying which tools and access levels should be granted to a user.

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## Policy-based control

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Users should be given only the permissions they need to complete their responsibilities. An IAM should be developed to grant users access to resources depending on their employment function, department, or any other relevant attributes.

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## Password Reuse

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An old 3rd party database is compromised; your users are still using a compromised password. Users using the same password across many accounts.

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## Privilege Escalation

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When attackers first exploit a system, they generally get access with limited privileges. To get greater and more access, they employ a variety of privilege escalation strategies.

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## Pharming Attacks

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A pharming attack is another type of attack that manipulates the DNS name resolution process. It aims to compromise either the DNS server or the DNS client.

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## Platform as a Service (PaaS)

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Capability to deploy applications in the cloud, Languages, libraries, services, some control by user

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## Password Hashes

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Most systems do not save an account's real password. They instead save a hash of the password. Hash attacks target the hash of a password rather than the password itself.

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## Privileged user

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A typical privileged user is a system administrator who is in charge of administering an environment, or an IT administrator who is in charge of certain software or hardware.

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## Purpose of a risk register

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The main purpose of a risk register is to serve as the database for specific risks. These risks might be safety risks, commercial risks, financial risks

The risk register enables a project manager or company to list all possible or potential risks into rows, and then identify and outline important components of these risks in the associated columns.

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## Privilege Management

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When users are given the ability to do something that typically only an administrator can do, they have been granted privileges and their account becomes a privileged account

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## Public Key Infrastructure

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It is a technology used in the digital world to authenticate individuals and devices.

The basic idea is for one or more trusted parties to digitally sign papers confirming that a specific cryptographic key belongs to a specific user or device.

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## PKI Authentication

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When a user attempts to authenticate their identity to a server, the server creates and sends random data to the user.

The user encrypts the data and sends it back to the server using their private key.

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## PKI Digital Signing

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The first step is to compute a hash value for the document to be signed.

The hash value is produced using an algorithm, and the output is a digital fingerprint of the file's contents.

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## Qualitative Risk Analysis

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A qualitative risk analysis uses a pre-defined grading scale to prioritize the discovered project risks. Risks will be graded based on their likelihood of occurrence and the impact on project objectives if they occur.

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## Quantitative Risk Analysis

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It is a further examination of the project's greatest priority hazards, during which a numerical or quantitative rating is assigned in order to construct a probabilistic analysis.

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## Remote Terminal Unit (RTU)

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RTU is a microprocessor-controlled electronic device. This uses telemetry data and messages from its Master Supervisory System to control connected objects to interface objects. Remote telemetry unit and remote control unit may also be used in other words for RTU.

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## Respond In Phases of the Incident Response

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Developing and implementing strategies to respond to the detected incidents

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## Recover In Phases of the Incident Response

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Developing and implementing a plan to restore the business operations after the occurrence of the incident

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## Remove file or Directories

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To remove a directory and all its contents, including any subdirectories and files, use command `Rm <file name/directory>`  
-r recursive

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## RAW Table

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Iptable's Raw table is for configuration exemptions. Raw table has built-in chains.

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## Rogue Access Points

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Attackers build physically illegal wireless access points that enable them to access a secure network by depriving network users' connections

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## Redsn0w

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Redsn0w is a jailbreaking tool for iOS devices that works on both OS X and Windows.

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## Reduce attack surface

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Deleting all unneeded or unnecessary applications and services from all computer devices.  
There is usually no reason for every workstation in your firm to be running a mail server, ftp server, and DNS.

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## Retirement/Disposal

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Properly dispose of system  
Move data to another system or discard accordingly  
Repeat full cycle with a new project initiation

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## Relational Database models

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A DB in the form of tables (rows & columns) related to each other  
Stores data in such a way that a data manipulation language can be used independently on data  
Uses a database engine (Oracle, Sybase, etc...)

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## Repeatable

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A formal structure has been developed including quality assurance. However, no formal process models have been defined.

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## Risk Assessment (RA)

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Risk assessment is a formal and systematic method for identifying and quantifying events, their frequencies / probabilities, and the amount of repercussions / losses to recipients as a result of exposure to hazards such as natural disasters and hardware, software, and human system failures.

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## Regulation

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Many government and industry regulations, such as HIPAA-HITECH, PCI DSS V2 and Sarbanes-Oxley (SOX), mandate rigorous vulnerability management practices

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## Risk Management

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Mature organizations treat it as a key risk management component. Organizations that follow mature IT security principles understand the importance of risk management.

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## Risk Assessment

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Larger issues should be articulated in risk-based language (e.g., ISO 27005), with the impact expressed in terms of business impact. Considerations relating to risk reduction and policy compliance should be included in the business case for any remedial action.

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## Remediation

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Only when mitigation activity is carried out as a result of the baseline and monitoring functions is security improved. Cross-organizational processes and workflows aid in the remediation process.

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## Root Cause Analysis

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It's critical to examine security and vulnerability evaluations. Changes to user administration and system provisioning processes may be required to eliminate the fundamental cause of security flaws.

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## Radio Frequency (RF)

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Radio frequency is abbreviated as RF. Any frequency in the electromagnetic spectrum that is linked with radio wave propagation is referred to as RF. RF field propagation is used in a lot of wireless technologies. The electromagnetic radiation spectrum includes these frequencies.

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## Rouge access point

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Any illegal access point (AP) on a network is referred to as a rouge access point. It might be caused by an attacker or a misunderstanding on the part of an employee.

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## RTO

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The RTO is the maximum tolerable length of time that a computer, system, network or application can be down after a failure or disaster occurs. An RTO is measured in seconds, minutes, hours or days. It is an important consideration in a disaster recovery plan (DRP).

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## RECOVERY POINT OBJECTIVE (RPO)

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Recovery point objective (RPO) is defined as the maximum amount of data that can be lost after a recovery from a disaster or a failure. An RPOs determines the maximum age of the data in backup storage needed to be able to meet the objective specified by the RPO, when a network or computer system failure occur.

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## rbash

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This Restricted bash shell provides minimal functionality to the person or script running in it.

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## Risk Mitigation

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The application of security policies and processes to lower the overall risk or impact of a threat is known as risk mitigation. Risk mitigation in cybersecurity can be divided into three components:

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## Rainbow Attack

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Rainbow table assaults are a sort of attack that tries to figure out the password by looking at the hash. A rainbow table is a large database of hashes that have already been generated.

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## Replay Attack

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A replay attack occurs when an attacker replays data from a communication session that has previously occurred. A replay attack occurs when a third party tries to imitate a client who was present during the initial session.

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## ROLE-BASED AWARENESS TRAINING

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If you have someone who is new to the organization, you might want to provide some role-based security awareness training. This is typically a specialized sort of training that is tailored to the role that this individual user plays with this program or data.

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## Record your findings

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If you have more than five employees in your office, you are required by law to write down your risk assessment process. Your plan should include the hazards you've found, the people they affect, and how you plan to mitigate them.

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## Review assessment and update if necessary

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Your workplace is always changing, so the risks to your organization change as well. As new equipment, processes, and people are introduced, each brings the risk of a new hazard.

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## RISK REGISTER

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The Risk Register records and keeps track of practically all of the hazards that have been recognized and are related to the project. As a result, it keeps track of dangers, including their status and history.

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## Remote virtual desktops model

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An image is copied to the local machine, which means a constant network connection is unnecessary.

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## Rogue Access Points

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Blue Team

Attackers build physically illegal wireless access points that enable them to access a secure network by depriving network users' connections

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## Role-based access control (RBAC)

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It is commonly used in networks to simplify the process of assigning new users the permission required to perform a job role.

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## Revocation

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Deleting all unneeded or unnecessary applications and services from all computer devices. There is usually no reason for every workstation in your firm to be running a mail server, ftp server, and DNS.

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## Six-STEP INCIDENT RESPONSE PLAN

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- Preparation
- Identification
- Containment
- Eradication
- Recovery
- Lessons learned

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## Security Analysts

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Professionals in this field work to restore the network. In an IR team, there are two categories of security analysts:

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## SIEM (Security information and event management)

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Collected log data from applications, host systems, networks, and security devices in the organization's technological infrastructure (e.g., antivirus filters and firewalls). Security issues are reported, including virus activity and unauthorized logins.

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## Shell

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The shell is the application that handles your requests. It analyses and invoke the commands. All commands in the shell follow standard syntax.

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## SYSTEM BOOTUP

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If you have a computer with the Unix operating system installed, all you have to do is turn it on to get it up and running. The system starts booting up as soon as you turn it on. Then it prompts you to log in.

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## Special Files

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Access to hardware such as hard disks, CD-ROM drives, modems, and Ethernet adapters is provided by several special files.

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## Software or hardware firewalls

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A software firewall is a program that is installed on each computer. Whereas a physical firewall is a piece of hardware that is located between your network and gateway.

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## Stateful multilayer inspection (SMLI) firewalls

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SMLI firewalls compare packets to known trusted packets at the network, transport, and application levels. It examines the entire packet and only allows it to pass if each layer is passed.

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## Spare Phishing

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It is a type of deception. This is similar to phishing, except the rootkit or malware is customized to a specific person or organization.

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## Sandboxing

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Sandboxing is a cybersecurity practice in which code is executed, observed, and analyzed in a secure, isolated network environment that simulates end-user operating environments.

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## Sensitive data storage

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Some applications utilize a poor security system in their database design, such that attackers may hack and steal sensitive user information.

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## SSLStrip

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MITM type attack that leverages SSL/TLS implementation flaws

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## Session Hijacking

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Attacker Steal DNS Poisoning Valid Session ID

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## SQL Injection

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SQL injection is a type of online security flaw that allows an attacker to interfere with a web application's database queries. It allows an attacker to see data that they wouldn't ordinarily be able to see.

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## Sandboxing Attacks

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Sandboxing helps to safeguard systems and users by restricting the resources available to the application on the mobile platform.

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## Sniffing

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Attacker reads, monitors, or captures complete packets of data passing between a client and a server.

An unencrypted network packet intercepted by a hacker might inflict significant damage to the company or institution.

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## Spoofing

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Spoofing is the practice of a bad actor impersonating a legitimate entity or someone they are not.

It usually refers to a computer faking an IP address, ARP, or DNS server.

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## Segment the network

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Segment is one of the simplest ways for businesses to safeguard their networks.

It refers to the practice of dividing a bigger network into smaller, self-contained networks.

Organizations can also use segmentation to keep sensitive data more secure and restrict access to essential information.

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## Switch from default to secure configuration

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Installed software's security settings to the most secure available configuration on a regular basis. New software is frequently used with default settings for lengthy periods of time.

This results in security breaches that could have

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## Social engineering

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Social engineering is a manipulation technique that exploits human error to gain private information, access, or valuables. In cybercrime,

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## Spare Phishing

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Blue Team

It is a type of deception. This is similar to phishing, except the rootkit or malware is customized to a specific person or organization.

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## Sensitive data storage

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Some applications utilize a poor security system in their database design, such that attackers may hack and steal sensitive user information.

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## Software as a Service (SaaS)

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Applications accessible from client devices, web browser, email, mobile, limited configuration

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## SMS phishing

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A social engineering technique used to target victims through SMS messages and may use different motivational techniques like scarcity or fear to entice the victim to perform an action, like clicking on a malicious URL within the message.

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## Security Operational/Maintenance

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Deleting all unneeded or unnecessary applications and services from all computer devices.  
There is usually no reason for every workstation in your firm to be running a mail server, ftp server, and DNS.

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## Spyware

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It is a secretly installed malicious code that is intended to track and report usage of a target system or collect data. Such data may include web browsing history, personal information, user names and passwords, and much more.

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## Security Assessment

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The security assessment process uses a standardized set of requirements in accordance with FISMA using a baseline set of NIST 800-53 controls to grant security authorizations.

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## SSP- System Security Plan

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A formal document that summarizes an information system's security needs and details the security procedures in existence or intended to achieve those criteria.

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## System Inventory

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This is a comprehensive inventory of all system components Hardware Software Network Port, Protocols, and Services

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## Security Assessment and Authorization (SA&A)

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The process of obtaining and maintaining a management decision to authorize the operation of an information system or a service and to explicitly accept the residual risk of an agreed-upon set of security controls, as well as the results of continuous security assessment is known as security assessment and authorization (SA&A).

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## System and Communications Protection (SC)

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The systems and communications protection policy defines the rules for effectively creating network segmentation and boundary protection across the company, as well as the essential regulations for implementing encryption.

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## System and Information Integrity (SI)

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System and information integrity ensures that the data being accessed has not been tampered with or harmed as a result of an information system fault.

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## Service Dependency Mapping

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The goal of this stage is to determine the source and root cause. It entails determining which system components are responsible. An obsolete version of an open source library.

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## Switches

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A switch has a number of ports into which computers can be connected. When a data frame arrives at any port of a network switch, it is examined for the destination address, relevant checks are performed, and the frame is sent to the appropriate device (s).

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## Streamline Data Collection

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Again, the most accurate equipment data stems from using sensory meters with CMMS platforms.

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## Single Point of Failure (SPOF)

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It is a potential risk presented by a weakness in the design, implementation, or configuration of a circuit or system in which a single fault or malfunction causes the entire system to fail.

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## Security in iam

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Traditional security frequently has a single point of failure - the password. If a user's password or, worse, the email address used for password recovery is compromised, your organization becomes vulnerable to attack.

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## Service Dependency Mapping

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Blue Team

The goal of this stage is to determine the source and root cause. It entails determining which system components are responsible. An obsolete version of an open source library.

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## Single Sign-on

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Authenticate their identities with a single portal. Once authorized, the IAM system serves as the source of identity truth for the user's other resources.

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## Secure access

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Securing at the identity level is critical; an IAM should ensure that the identities of those logging in are confirmed. This could include implementing MFA and adaptive authentication.

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## Security Access Markup Language (SAML)

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SAML is an open standard that allows identity provider systems to communicate authentication and authorization information.

This is the most widely used technique for an IAM to provide a user access to an application.

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## System for Cross-domain Identity Management (SCIM)

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SCIM is standard used to automatically exchange identity information between two systems.

When new users are assigned to the service, SCIM is utilized to maintain the user information up to date.

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## Shell

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It is a macro processor which allows for an interactive or non-interactive command execution.

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## Scripting

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It allows for an automatic commands execution that would otherwise be executed interactively one-by-one.

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## Secured Protocol and Algorithms

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Research in protocols and algorithms is a significant phase for the consolidation of cybersecurity at a technical level.

It defines the rules for information sharing and processing over cyberspace.

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## SYN Flood Attacks

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A SYN flood is a type of denial-of-service attack in which an attacker establishes a connection to a server quickly but does not complete it. The server must devote resources to waiting for half-opened connections, which might cause the system to become unresponsive to valid traffic.

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## Session Hijacking

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Session hijacking makes use of cookie-stored session IDs. When a person logs in to a website, the site frequently delivers a small text file with a session ID.

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## Service Level Agreement (SLA)

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A service-level agreement (SLA) is a contract between a service provider and its clients. It specifies the services that the provider will deliver and the service standards that the provider is required to meet.

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## Separation of Duties

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The basic principle of separation of duties is that no individual person, role, or group, should be able to execute all parts of a transaction or process.

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## Streamline Data Collection

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Again, the most accurate equipment data stems from using sensory meters with CMMS platforms.

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## Systems Administrators Policy

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Administrators have privileges and tasks that may require them to come into contact with sensitive, restricted, or personal information while doing their jobs.

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## System owner Policy

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The system owner may also be a manager whose duty it is to oversee and maintain the computers that carry data.

As a result, in addition to physically securing an organization's hardware infrastructure, the system owner should patch and upgrade operating systems,

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## Social Media Policies

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A social media policy essentially spells out how an organization and its personnel should behave online. It aids in the protection of your firm's online reputation and encourages employees to share information about the organization with their social media networks.

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## Single-Loss Expectancy

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The expected monetary loss each time an asset is at risk is referred to as single-loss expectation (SLE).

It is most typically used during risk assessment and aims to assign a monetary value to each individual threat.

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## Single-Loss Expectancy Formula

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Formula to calculate the Single Loss Expectancy is  $SLE = AV * EF$

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## SEGMENTATION

One of the best ways to protect sensitive resources is to utilize network segmentation. While there is no limit to the number of zones you can create in general, most networks have the zone types

## System Isolation

Systems can be isolated from other systems through the control of communications with the device.

## Software-Defined Networking

In a network, three planes typically form the networking architecture. Management plane  
This plane administers the router.

## Single Sign-On (SSO)

In an effort to make users more productive, several solutions have been developed to allow users to use a single password for all functions and to use these same credentials to access resources in external organizations.

## Symmetric Key Cryptography

It is an encryption system in which the sender and receiver encrypt and decrypt communications using a single common key. Symmetric Key Systems are faster and simpler, but the sender and receiver must exchange keys in a secure manner.



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## Threat Researchers

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The Cyber Threat Researcher will be a member of a global team that will track and analyze threat campaigns.

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## Triage Analysts

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They keep digital evidence preserved to conduct forensic investigation against the incident.

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## Threat actor

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An individual or group that seeks to harm a business or organization and is motivated through financial, personal, or political gain.

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## Target Value

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You may see all the available firewall rules on your system by running  
`iptables -list`  
There are no firewall rules specified on this system, as seen by the following iptables example.

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## TCP-level filtering

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Reassembling and inspecting all the packets in each TCP session.  
It can also be used for DNS filtering and traffic encryption.  
It well as offers Virtual Private Network (VPN) capability.

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## Tuple

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A Tuple is a comma-separated collection of Python objects. In terms of indexing, nested objects, and repetition, a tuple is comparable to a list, but a tuple is immutable, whereas lists are mutable.

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## Trojan

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Malicious code that masquerades as a harmless file. It usually performs a variety of actions, including key-logging, opening the computer to further attacks, destroying data or files, among others.

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## Third-Party Assessment Organizations (3PAOs).

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Perform initial and periodic assessment of CSP systems per FedRAMP requirements  
Provide evidence of compliance  
Have on-going role in ensuring CSPs meet requirements.

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## Tripwire

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Tripwire provides a comprehensive, automated view of operational, regulatory, and security compliance throughout the data center's dynamic environment.

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## Tailgating

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Tailgating also known as piggybacking occurs when a hacker follows someone with an approved access card into a protected building. This assault assumes that the individual with valid access to the facility is kind enough to keep the door open for the person in front of them, presuming they are permitted to be there.

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## TCP Tracer out

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TCPTraceroute is a traceroute implementation that uses TCP packets. TCPTraceroute follows routes via networks to determine what is obstructing traffic.

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## Threats

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Threats can come from anywhere and are becoming more sophisticated all the time, making it increasingly difficult to be completely prepared for data breaches.

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## Threat Intelligence

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There is a proactive response mechanism in place to deal with cyber threats. Research and Development activities are already underway at various research organizations to fight threats in cyberspace.

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## Threat Protection

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Through negligence or malicious intent, employees and third parties with stolen credentials can leak or steal sensitive data from cloud services. To help pinpoint anomalous user behavior, CASBs can compile a comprehensive view of regular usage patterns and use it as a basis for comparison.

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## Type 1 hypervisor

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A guest operating system runs on another level above the hypervisor.

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## Type 2 hypervisor

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A Type 2 hypervisor runs within a conventional operating system environment.

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## Unix Architecture

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This operating system has a four-layered design. Hardware, Kernel, System Call Interface (shell), and application libraries/tools, as well as utilities, are all part of it.

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## Unintended Permissions

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Unknown applications sometimes allow attackers to enter doors by offering unknown permission.

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## Userland Exploit

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A jailbroken user enables access at user-level but does not allow access at the iboot level. This sort of exploit cannot be linked since recovery mode loops are not possible. You can patch them using Apple.

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## Understand Aging Assets

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Forty percent of unplanned downtime is caused by aging equipment. But maintenance professionals can sometimes do more than they realize is possible to manage these failures.

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## URL Hijacking

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When someone buys a domain name that is similar to a valid domain name, this is known as typo squatting (also known as URL hijacking). People frequently do so with malice in mind.

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## User Policy

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A user does not absolve someone of his or her responsibility to become acquainted with the organization's security policy and to uphold it by adhering to all security measures.

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## Virus

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Malicious code that spreads from a computer to computer via attaching itself to other files. The code executes when the attached files opened.

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## Vulnerability Assessment

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The next stage is to evaluate the environment for known vulnerabilities. This is performed by regular analyses of the environment's vulnerability and configuration. Network-based vulnerability assessment (VA) has been the primary method employed to baseline networks, servers and hosts.

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## Virtual machines

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A virtual machine is a computer file that duplicates the behavior of a real computer. It can run as a distinct computing environment in a window, usually to run a different operating system.

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## Vulnerability management process

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The process of finding, analyzing, treating, and reporting security vulnerabilities in systems and the software that runs on them is known as vulnerability management.

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## Vulnerability databases

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A vulnerability database (VDB) is a platform for storing, updating, and spreading information regarding computer security flaws that have been discovered.

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## Vendor vulnerability announcements

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Unknown applications sometimes allow attackers to enter doors by offering unknown permission.

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## Vulnerability analysis

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The goal of this stage is to determine the source and root cause of the vulnerabilities discovered in the previous step. It entails determining which system components are responsible for each vulnerability.

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## Virtual

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All the network segmentation components discussed thus far separate networks physically with devices such as routers and firewalls, a virtual local-area network (VLAN) separates them logically.

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## Virtual Desktop Infrastructure (VDI)

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Hosts desktop operating systems within a virtual environment in a centralized server.

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## Wireless Forensics

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Wireless forensics analyzes and investigates traffic in a wireless environment using specialized tools and procedures.

When computer crimes or cyberattacks are perpetrated by breaching security protocols in wireless networks, this type of study is critical.

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## whoami

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While you're logged into the system, you might be willing to know: Who am I?  
The easiest way to find out "who you are" is to enter the whoami command

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## Who is logged in?

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Sometime you might be interested to know who is logged in to the computer at the same time. There are three commands available to get you this information, based on how much you wish to know about the other users: users, who, and w.

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## Worms

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Malicious code that spreads from computer to computer, within a network, on its own. It ultimately consumes network bandwidth.

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## Wireless Scanner

Wireless vulnerability scanners are used to identify rogue access points and also validate that a company's network is securely configured.

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## Wireshark

Wireshark is a free and open source network protocol analyzer. It allows users to examine data traffic on a computer network in an interactive manner. The development effort was formerly known as Ethereal.

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## WLAN

WLAN is a network that connects two or more computers using a wireless distribution mechanism. They have high-frequency radio waves and an internet access point (AP).

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## WWAN

WWAN is a WAN with the addition of wireless connection. It offers wireless coverage on a regional, national, and global scale.

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## WMAN

WMAN is a wireless metropolitan area network capable of covering an entire city. It is larger than WLAN but smaller than WWAN. WMAN is controlled by any corporate or public entity.

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## Wireless Networking

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Connecting multiple devices without any physical connection.  
Transfer data through Radio Frequency

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## Wireless Networks Works

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Wireless networks use radio frequency (RF) technology  
When an RF current is applied to an antenna, an electromagnetic field is generated.

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## Wireless Networks Standards

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Wireless technology, like the technology connected with it, has changed over time. It's always a good idea to perform your own research before investing in any of these technologies.

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## WIRELESS NETWORKS BENEFITS

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Voice over Internet Protocol (VoIP).  
It has enabled mobility.  
They are less expensive than wired networks  
Data encryption methods

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## Wired Equivalent Privacy (WEP)

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The first encryption system designed specifically for wireless networks  
WEP, on the other hand, has several well-known security vulnerabilities, is complex to configure, and is readily cracked.

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## Wi-Fi Protected Access (WPA)

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For encryption, most modern WPA implementations employ a pre-shared key (PSK). To produce keys or certificates, WPA Enterprise use an authentication server.

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## Wi-Fi Protected Access (WPA2)

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A wireless security standard based on the 802.11i wireless security standard, which was completed in 2004. The adoption of the Advanced Encryption Standard (AES) WPS assaults remains significant in contemporary WPA2-capable access points, as is the case with WPA.

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## Wireless Wizard

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Wireless Wizard is a free tool that will assist you in getting the greatest performance out of your wireless network connection. The program also includes a set of diagnostic tests that you can use to determine how well your wireless network is working.

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## Wireless Key Generator

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It is a basic application for enhancing network security in the Wireless Key Generator. It invites you to choose the security type and key strength that you use on your wireless network.

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## Zero-Trust Policy

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A zero trust policy implies that an organization's IAM solution is always monitoring and securing the identification and access points of its users. Zero-trust standards ensure that each employee is constantly identifiable and their access is regulated.

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## Zero trust centralized administration

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This could imply transferring people from other systems or synchronizing your IAM with other user directories.

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**zsh**

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The Z shell is a modern take on the bash family of shells. It offers neat improvements, like command spellchecks and suggested corrections.

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## Zero-Day Attacks

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A zero-day vulnerability is a flaw or issue that has yet to be discovered. A zero-day assault takes use of a previously unknown flaw. Frequently, the vendor is unaware of the problem.

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## Application Based Attacks

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The application layer is the most difficult to protect. The flaws found here frequently rely on complex user input scenarios that are difficult to define with an intrusion detection signature.

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## Application-level filtering

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Email filters and web proxies are examples of application level filters. These act as proxies for one or more services. These filters are extremely costly, especially when applied to high-bandwidth web traffic.

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## Access control list (ACL)

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In computer security, an access-control list is a list of permissions associated with a system resource.

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## Brute Force Attacks

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A brute force attack tries to guess every conceivable combination of characters. Online and offline brute force assaults are the two forms of brute force attacks.

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## Asset value (AV)

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Asset value (AV) is the value per share as determined on a specific date or time.

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## Chief Information Officers (CIOs)

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A chief information officer (CIO) is a company leader who is in charge of information and computer technology management, implementation, and usability.

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## Configuration Management Plan (CM Plan)

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Throughout the lifecycle, the Configuration Management Plan establishes uniform CM techniques for managing system software, hardware, and documentation changes.

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## Controlled Unclassified Information (CUI)

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Controlled Unclassified Information (CUI) is information that must be protected or disseminated in accordance with existing laws and regulations.

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## Control Definition

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Each control objective (a-k) will need to be answered individually.

As a guide to understanding the requirements for each control, the Rev 4 Test Cases may be reviewed.

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## Configuration Standards by Device Role

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It focuses on vulnerability assessment falls short of achieving. One of the most important vulnerability management program goals:

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## Certificate Management

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Certificate management is the process of managing digital security certificates. Certificate authorities are responsible for certificate management and serve as a registration authority for subscriber certificates.

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## Data acquisition and duplication

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Recovering deleted files and deleted partitions from digital media to extract the evidence and validate them.

Helps you to identify the evidence quickly, and also allows you to estimate the potential impact of the malicious activity on the victim

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## Deep packet inspection (DPI)

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Deep packet inspection examines the data within the packet itself. While basic firewalls only look at packet headers.

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## Denial of service or interruption of availability

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The Dynamic Host Configuration Protocol is a network management protocol used on Internet Protocol local area networks. A DHCP server must be present on the network.

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## Dynamic Host Configuration Protocol (DHCP)

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Cloud adoption has removed many of the barriers preventing effective collaboration at distance.

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## evasi0n7

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As an iPhone, iPod touch, iPad, and iPad mini devices running iOS 7.0 to 7.0.6 is suitable as a junk tool (Devices that have been updated Over the Air [OTA] should be restored with iTunes first).

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## EXIF

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Exchangeable image file format information from graphic files, as well as the information discovered through the URL of a scanned website.

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## Exploit Impact

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Any attack that takes advantage of weaknesses in programs, networks, operating systems, or hardware is referred to as an exploit.

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## Ethical hacker

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A person who hacks into a computer network in order to test or evaluate its security rather than with malicious or criminal intent.

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## Establish Network Access Controls

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First you have assessed your assets and identified high-priority problem areas. Next step is to establish network access controls to help mitigate the risk of insider threats.

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## Exposure factor (EF)

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Exposure factor (EF) is a percentage that measures the possible loss that could occur to an asset if a given threat occurs.

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## Evidence Collection

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When it comes to tracing the attacker and comprehending the attack's procedure, evidence collecting is important. As a result, incident responders should know where to look for evidence and how to gather it.

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## IEEE 801.11

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IEEE 802.11 refers to a set of standards that define wireless LAN communication (wireless local area networks, or WLANs). Consumers refer to the technology behind 802.11 as Wi-Fi.

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## ksh

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The Korn Shell provides a particularly strong scripting language.

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## Media Protection (MP)

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These policies define how to use, store, and transmit data while ensuring its confidentiality and integrity.

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## Manage user identities

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IAM systems can be the sole directory used to create, change, and delete users. Identity and access management can also be used to generate new identities.

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## MTransference

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Finally, you can transfer the risk onto another party. Naturally, this will usually require some form of trade-off (or cost). Shifting the consequence of a risk to a third party is not always easy but is often overlooked.

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## Nexpose Community

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Nexpose is a popular vulnerability assessment tool. Nexpose Community Edition is a free application, while other Nexpose editions are charged.

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## Proxy firewalls

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Traditional firewall technology is combined with extra features. Such as encrypted traffic inspection, intrusion prevention systems, anti-virus, and more.

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## Switch spoofing

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A type of VLAN hopping attack that occurs when an attacker can emulate a valid trunking switch on the network by speaking 802.1Q.

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## Process States

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Each CPU (or CPU core) in a multi-tasking operating system can work on only one process at a time. As a process runs, its immediate CPU time and resource allocation requirements change.

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## Process Control Using Signals

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A signal is a type of software interrupt that is provided to a process. Signals communicate events to a running application. Events that trigger a signal can be a mistake, external events, or explicitly requested events.

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## Rootkits

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Malicious code that is intended to take full or partial control of a system at the lowest level (core or kernel). They often hide themselves from monitoring or detection and modify system files. Most rootkit infections install back trapdoors, spyware, or other malicious codes once they gain control of the target system.

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## SolarWinds

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Easily scan your network devices' firmware for reported CVEs that can help to keep your network secure and compliant.  
Keep devices current and stay ahead of network vulnerabilities

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## Secure Hash Algorithm 3. (SHA-3).

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A user then logs in using a username and password.

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## Wireless Networks Threats

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Because of the ubiquitous usage of the internet, we can perform our business procedures online and without being constrained by cables and wires. Wireless networks are one of the relatively new technologies that the internet has introduced into our lives.

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## Zero-day exploits

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Start an attack on a mobile OS or app, taking advantage of an undiscovered vulnerability.

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## Zero-day assaults

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Given the impossibility of flawless security, businesses should supplement vulnerability management and shielding with more effective monitoring.

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