

Information Assurance Security - CT-1

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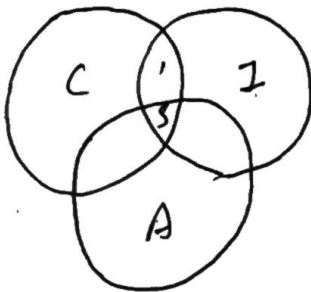
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② * Attacks can be passive, intentional and direct or indirect.

* Active Attack: An attacker to modify and data intentionally.

* Passive Attack: Someone who casually reads sensitive information not intended for his or her use is committing a passive attack.

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* CIA stands for confidentiality, integrity and availability.

* Security Components added to CIA

- Authentication
- Authorization
- Non repudiation.

Need to balance CIA

- Example 1 : C vs Z+A.
- * Disconnect computer from internet to increase confidentiality.
- * Availability suffers, integrity suffers due to lost updates.
- Example 2 : I vs C+A.
- * Have extensive data checks to increase integrity.
- * Confidentiality suffers as more people see data, availability suffers.

③ Threat:-

A category of objects, people or other entities that represent a danger to an asset. Threats are always present and can be purposeful or undirected.

Threat Agent:-

The specific instance or a component of a threat.

Vulnerability :-

(3)

A weakness or a fault in a system or protection mechanisms that opens it to attack or damage.

- (4) Consequences due to lack of information assurance.
- * Financial and commercial loss.
 - * Loss of customers and commercial embarrassment.
 - * Loss of staff.
 - * Investments will be stopped.
 - * Loss of image and reputation.
 - * Penalties from legal authorities.
 - * Loss of privacy / personal information.
 - * Operational downtime.

- (5) Threats can be classified as Internal and external threats. Internal threats stem from inside of any organization and explicit system. External threats are outside attacks. According to me Internal threats are more dangerous because they can maliciously obtain administrator privileges.

This may result in largest data breach like ④
Yahoo email leaks. Even ordinary employees can
also exploit the vulnerabilities accidentally by
viewing anything on a malicious website. They
may unintentionally download a virus or
also affect the availability by changing access
rights and deactivate security tools.