INFORMATION SECURITY

Fundamentals

IMPORTANT SECURITY CONCEPTS

Sensitivity

Concealment

Privacy

Seclusion

Criticality

Usability

Non-repudiation

Accessibility

Discretion

Accountability

SENSITIVITY

Sensitivity refers to the quality of information, which could cause harm or damage if disclosed.

Maintaining confidentiality of sensitive information helps to prevent harm or damage.

CONCEALMENT

Concealment is the act of hiding or preventing disclosure. Often concealment is viewed as a means of cover, obfuscation, or distraction.

A related concept to concealment is security through obscurity, which is the concept of attempting to gain protection through hiding, silence, or secrecy.

While security through obscurity is typically not considered a valid security measure, it may still have value in some cases. 1

SECRECY

Secrecy is the act of keeping something a secret or preventing the disclosure of information.

PRIVACY

Privacy refers to keeping information confidential that is personally identifiable or that might cause

harm, embarrassment, or disgrace to someone if revealed.

ISOLATION

Isolation is the act of keeping something separated from others.

Isolation can be used to prevent commingling of information or disclosure of information.

Each organization needs to evaluate the nuances of confidentiality they wish to enforce.

SECLUSION

Seclusion involves storing something in an out-of-the-way location.

NON-REPUDIATION

Nonrepudiation ensures that the subject of an activity or who caused an event cannot deny that the event occurred.

Nonrepudiation prevents a subject from claiming not to have sent a message, not to have performed an action, or not to have been the cause of an event.

It is made possible through *identification*, authentication, authorization, accountability, and auditing.

USABILITY

Usability = being easy to use or learn or being able to be understood and controlled by a subject.

ACCOUNTABILITY

Accountability = providing and maintaining a way to enable individual accountability for violations, non-compliance, or other forbidden activities.

ACCESSIBILITY

Accessibility is the assurance that the widest range of subjects can interact with a resource regardless of their capabilities or limitations.

DISCRETION

Discretion is an act of decision where an operator can influence or control disclosure in order to minimize harm or damage.

CRITICALITY

Criticality: The level to which information is mission critical is its measure of criticality.

The higher the level of criticality, the more likely the need to maintain the confidentiality of the information.

High levels of criticality are essential to the operation or function of an organization.

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