

The CIA Triad & Authentication Vs Authorization

During this reading you will learn the aspects of the CIA Triad, and their purposes. You will also learn about Authentication, Authorization and how they differ. By the end you will be able to understand how the CIA Triad functions, and why it's useful in our society.

What is the CIA Triad?

The CIA triad is a combination of confidentiality, integrity, and availability. Each one of these have a unique function designed to protect information. They all work together to help organizations thrive, and improve their security. No concept is more important than another as they all serve their right purpose.

Confidentiality

Confidentiality has to do with keeping an organization's data private. This often means that only authorized users and processes should be able to access or modify data (Fasulo 2021). Confidentiality is important because it ensures the transportation of information is safe. Without it unauthorized users would have the ability to access said information and possibly modify it.

Integrity

What is integrity? Integrity deals with the accuracy of data. Now how is this important? Data integrity allows for authorized users to obtain 100 percent true data. This means it has not been altered in any way, shape or form from unauthorized users. Organizations often "include checksums, even cryptographic checksums, for verification of integrity." (Chai 2022)

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Availability

Will these resources be available when I need them? That's the entire concept of availability. "Availability is best ensured by rigorously maintaining all hardware, performing hardware repairs immediately when needed." (Chai 2022) You have to be ready for the unexpected, and have something to resolve issues quickly. Having a recovery plan on hand is essential. Without a recovery plan, lost information could potentially never be restored.

Authentication Vs Authorization

Authentication refers to having a tool to access something. (information) An example would be.. using a fingerprint to unlock a device. No one has the same fingerprints as another. With that being said.. Without that tool there would be no way of authenticating yourself to access the information.

Authorization on the other hand refers to giving a user access to specified information. To make it more clear, imagine everyone is given the same code to open a door. But once the door is unlocked certain people are allowed certain ways. That's how it works. Permissions are given to users. But not every user has access to the same thing.

After reading you should have a greater understanding of the CIA Triad and its functions. You should also be able to decipher the differences between authentication vs authorization. Organizations use these principles day to day to keep their businesses

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secure. The CIA triad is quickly evolving each day due to how unpredictable the cyber world is.

Work Cited

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