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Date: 8/14/2025

Title: The CIA Triad

The CIA Triad

The CIA triad, also known as Confidentiality, Integrity, and availability, is seen as a guidance principle for specialists in cybersecurity to ensure data is safely secured.

Confidentially

- Prevents unauthorized parties access to sensitive data by using methods such as encryption, two-factor authentication, and access control

Integrity

- Ensures that information is not altered without the authorization of anyone in control of the data within the organization

Availability

- Data should already be consistently accessible to authorized parties by using techniques such as backups, redundancy, and maintaining technical infrastructure systems.

What are the differences between Authentication & Authorization?

- Authentication deals with verifying identity; meanwhile, Authorization focuses on who has the right to access certain information.

All these concepts above are guiding factors of keeping Internet security for many organizations safe globally by minimizing risk to cyber attacks and addressing vulnerabilities in the internet systems.

Citations

Irwin, L. (2023, February 14). What Is the CIA Triad and Why Is It Important? IT Governance UK Blog. <https://www.itgovernance.co.uk/blog/what-is-the-cia-triad-and-why-is-it-important>

Fortinet. (2025). What is the CIA Triad and Why is it Important? Fortinet.

<https://www.fortinet.com/resources/cyberglossary/cia-triad>

Hashemi-Pour, C. (2023, December 21). What is the CIA triad (confidentiality, integrity and availability)? TechTarget.

<https://www.techtarget.com/whatis/definition/Confidentiality-integrity-and-availability-CI>

