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CIA Triad

The CIA Triad is a three part approach to the protection of information in the IT world, its core values represent Confidentiality or the C, Integrity or the I, and Availability or the A. Confidentiality is a big part and arguably the most important part in data protection, confidentiality represents privacy and protection for data and aims to add as many safeguards when accessing information, things like strong passwords, routing numbers on bank accounts and other safeguards represent confidentiality. Integrity is the heart or lungs that connects everything; it's the overwatch that makes sure everything is running smoothly from proper accessing of files and user accounts, to dealing with potential hazards that come up, Integrity essentially keeps up the status quo. Availability is the consistency of this entire approach, the blood flow that makes sure everything is running and maintains an operational standard across the OS or operating system for all devices and protections.

CIA vs Authentication and Authorization

Authentication and Authorization are well known terms at this point and are very much alike, Authentication is the verification process of user identity and authorization is the accessibility part of the same process. Although Authentication and Authorization are important and work, they aren’t the best methods in protecting an OS. The biggest flaw of Authentication

and Authorization in comparison to CIA is the lack of maintenance for an OS, a good hacker can make it past the Authentication system and then be Authorized in but cause havoc once inside, and with no system in place to check the operational level of the OS, you essentially lost the battle. Authentication and Authorization are a great part of Confidentiality but using them alone will not be the best means in protecting a business or OS.

Conclusion

In protecting a system we need as many safeguards as possible in order to have the best possible chance a threat gets caught before it can do damage, this is why adopting a method like CIA would be better than just Authentication and Authorization, you can never be too safe.

Sources:

"Authentication vs. Authorization | Okta." *Www.okta.com*, www.okta.com/identity-101/authentication-vs-authorization/#:~:text=Authentication%20confirms%20that%20users%20are.