Week 2 Assignment: Access Control

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**The AAA Framework for Access Control**

What is the AAA framework? The three A’s of access control are Authentication, Authorization, and Accounting. According to Wills, authentication is the process of verifying that a user is who they say they are (2019). This is commonly done by some type of login credentials, such as a username and password for logging into a system or website. Authorization is often confused with authentication, though they are related, they are two completely different things. Authorization determines the level of access that an authenticated user has in the system. For example, human resources personnel in a company needs access to the personal information of employees, whereas, a regular employee should not have that type of information on others. The third A, accounting, involves the tracking of the actions of a user within the system. Accounting ensures that users accessing a company’s resources are not using them for personal reasons or gain.

**Types of Access Controls**

There are several ways for IT professionals to control access to systems they are responsible for. There are technical security controls, administrative security controls, and physical security controls. Technical security controls consist of things like firewalls, encryption, antivirus and anti-maleware, and intrusion detection and intrusion prevention systems. Administrative security controls deal with the policies, guidelines, and procedures for the security practices of the organization. Physical security controls involve things like security guards, cameras, access cards and badges, and locks with key, codes, or biometric access.

**What is Access Control**

Simply put, access controls are the safeguards and countermeasures that are put in place to reduce the risk of a threat from gaining access by exploiting security vulnerabilities. There are no flawless systems, but the more that can be done to lower the risks, the less likely it is that an intrusion will occur, or cause serious damage.

**References**

Wills, M. (2019). [(ISC)2 SSCP Systems security certified practitioner: Official study guide](https://ashford.instructure.com/courses/87741/modules/items/4439845) (2nd ed.). John Wiley & Sons.