

A major component of information security is securing access to protected assets, data, and information. Included under controlling access to secured resources are:

- Access to resources by unauthorized persons
- Modification to data or information by unauthorized persons
- Destruction of data, information, or assets by unauthorized persons

Unauthorized access may be physical, such as accessing CPUs, hard disks, or logical, like accessing the system directly or remotely. In either case, restricting access to resources is key to their protection. Access control is one of the most important aspects of information security. It's implemented in a variety of ways that depend on the nature of the resource and its environment. Access control ranges from the simplistic, locking the computer room, to using login and passwords, applying encryption, or requiring digital signatures to access the data. Identify and explain a security method, mechanism, or application for each of the following access control types, including how it works and the protection it is meant to provide:

1. Preventative
2. Detective
3. Corrective
4. Deterrent
5. Recovery
6. Compensative