

Click Thinking Spotlight

Access Control

Your company's sensitive data is only as safe as those who use it. So it's important to consider access control as a part of your overall information security plan.

- Access control defines who has permission to access company networks and resources and puts systems in place to ensure these guidelines are enforced.
- Assigning which individuals have access to what is a key component that may be influenced by factors such as job title, role and your company's data classification policy.
- Authentication is the act of verifying that individuals requesting access are who they actually say they are. Network credentials or name badges are two examples of ways this can be done. In some cases, more than one method is required, a process called multi-factor authentication.
- Authorization acknowledges that while an individual may be who they say they are, he or she may not be authorized to access certain information. So it's important to factor in where permissions begin and end. This is where the importance of assignment plays out.
- In the Discretionary Access Control (DAC) model, one of the oldest in use, the owner of the data decides who gets access and what rules apply. It works best in small organizations where oversight is easy.
- In the Mandatory Access Control (MAC) model, access is granted based on information clearance standards set by a central source or authority. It's often used in government where position is tied to data classification labels such as Confidential or Top Secret.
- In the Role-Based Access Control (RBAC) model, the individual's role determines access privileges based on key security principals. This includes the 'least privilege' principal, a key concept of security, that limits privileges to the minimum required to do the job.
- In the Attribute Based Access Control (ABAC) model, factors such as time of day and the individual's location are used to determine whether access will be granted.
- The method your company chooses will depend on the type of business you run, the industry you occupy and the information you use in your everyday business. It may also be influenced by regulations and compliance standards.
- Access control can be a complex challenge for any organization. However, an information security firm or consultant can help you navigate this landscape.



For the Access Control module, see your manager or information security contact.