Lesson 8 Business Types

A security professional must ensure data security for different business types:

Intrabusiness security:

- **Privacy** ensures that only authorized people can read the information. For example, most companies keep salary plans private.
- **Integrity** ensures that no one can change or delete data. For example, payroll data needs integrity so that no one changes a payment once it has been sent to the check printer.
- **Authorization** means that someone is approved to do a specific task or access specific data. For example, changing salary plans requires proper management authorization.
- **Access control** involves restricting information to the authorized people. For example, salary information is stored on a server that only human resources (HR), Accounting, and specific managers may access.

Interbusiness security:

- **Message authentication** confirms the identity of the person who started a correspondence. For example, a broker needs to know that a message to "buy 1,000 shares of XYZ stock for account ABC" came from an authorized employee of ABC.
- A **digital signature** binds a message or some data to a specific entity. Note that this is not a digitized signature, which is an image of an electronically reproduced signature.
- **Receipt and confirmation** are often used for e-mail. Receipt verifies that information has arrived. Confirmation acknowledges that a service has been provided.
- **Nonrepudiation** means that the person who sends a message cannot deny it later. For example, if the person who made the "buy" order wishes to dispute it after XYZ stock drops 50 percent, nonrepudiation proves the original message is valid.

Extrabusiness security:

- **Anonymity** disguises a user's true identity. For example, a dissident in a repressive country might want to post information to a Web discussion site without the authorities' knowledge.
- **Time stamping** indicates the exact time the information was created or sent. For example, people submitting tax returns at the last minute may wish to prove they met the deadline.
- **Revocation** stops authorization for access to data. For example, a person whose credit card is stolen calls the issuer to stop use of the card.
- **Ownership** ties a person to the information to create a legal right. For example, most documents have copyright notices that indicate who wrote them.