

Network Security Definitions

Keywords	Text	Magazine
Secrecy (confidentiality)	has to do with keeping information out of the hands of unauthorized users.	Ensures that only authorized users can read data.
Authentication	determining whom you are talking to before revealing sensitive information or entering into a business deal.	Ensures that the other party in a dialogue is not an impostor.
Integrity	ensuring that a message you received was really the one sent and not something that a malicious adversary modified in transit or concocted.	Indicates that data are protected from unauthorized modification.
Nonrepudiation	signature to prove that your customer really placed an electronic order when he later claims otherwise (or never placed any order).	Prevents someone from denying having sent a message.
Availability		Ensures that a system is immune to denial-of-service attacks, which can prevent access by legitimate users.
Privacy		Provides controls on how information about individuals will be used and disseminated.
Reference	Andrew S. Tannenbaum, Computer Networks, 4 th Edition, Pearson Education International, 2003.	Security Performance, Daniel A. Menasce (menasce@cs.gmu.edu) IEEE Internet Computing, May-June, 2003, pp. 84-87.