

Authentication & Passwords

Dr Tay Kian Boon

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Main Objectives: Computer Security

There are 7 key concepts in the field of computer security:

1. Authentication
2. Authorization
3. Confidentiality
4. Data/message integrity
5. Accountability
6. Availability
7. Non-repudiation

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1. Authentication (**identity** -solved by eg 2FA)
2. Authorization (**permission** -solved by Access control list)
3. Confidentiality (**secrecy** contents -solved by encryption)
4. Data/message integrity (**unmodified**-solved by MAC-msg auth code)
5. Accountability (**who is responsible** -solved by log trail)
6. Availability (**access** –solved by adding redundancy)
7. Non-repudiation (**undeniability** -solved by digital signatures)

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1. Authentication (identity -solved by eg 2FA) crypto
2. Authorization (permission -solved by Access control list)
3. Confidentiality (secrecy contents -solved by encryption) crypto
4. Data/message integrity (unmodified-solved=msg auth code) crypto
5. Accountability (who is responsible -solved by log trail)
6. Availability (access –solved by adding redundancy)
7. Non-repudiation (undenialability -solved by digital sig) crypto

AUTHENTICATION

- *Authentication* is the act of verifying someone's identity, AND ESPECIALLY IMPT IN CYBERSPACE