Something You Know: Passwords

- A one-time password (OTP) system, which forces the user to enter a new password each time she logs in, eliminates the risks of using a password multiple times.

- This basic idea to implement this naturally leads us from the topic of "something you know" to the topic of "something you have."

- OTP is sent to your bank token in the past when u try to access your bank account.

- Now banks send OTP your handphone.

- Don't lose your handphone!

Something You Have

3010 Computer Security-TKB

Something You Have:

- A second general method of authenticating a user is based on something that the user has.
  - OTP Cards (one-time password)
  - Smart Cards
  - ATM Cards

Something You Have: OTP Cards

- OTP products generate a new password each time a user log in.

- One such product, by RSA Security, is the SecurID card

- The SecurID card is a device that flashes a new password to the user periodically (every 60 seconds or so).

- When the user wants to log into a computer system, he enters the number displayed on the card when prompted by the server.

Something You Have: OTP Cards

- Server knows the algorithm that the SecurID card uses to generate passwords, and can verify the password that the user enters.

- Other variations of OTP systems as well:

- For instance, some OTP systems generate passwords for their users only when a personal identification number (PIN) is entered.

- Also, while OTP systems traditionally required users to carry additional devices, they are sometimes now integrated into personal digital assistants (PDAs) and cell phones.