## **Biometrics and Your Identity**



#### **Biometrics:**

A <u>unique</u> physical or behavioral characteristic which can <u>practically</u> be collected, stored, and compared against; for the purpose of positive identification.



## Biometric Types and Terms

- Behavioral and physiological
- Static and dynamic
- One to one compare
- One to many searching
- False Acceptance Rate (FAR)
- False Rejection Rate (FRR)
- Failure to Enroll (FTR)



#### Some Forms of Biometrics

- Fingerprint
- Facial recognition
- Iris
- Voice recognition
- Hand Geometry



### Other Forms of Biometrics

- Keystroke dynamics
  - www.biopassword.com
- Retina San
- Palm Print
- Signature



#### How does it work?

- 1. Capture a Biometric-Enrollment
- 2. Process the Biometric-Algorithm
- 3. Store Result-Template
- 4. Compare-one to one
  - verification
- 5. Find-one to many
  - identification
- 6. Accept or Reject



# How could a biometric be used? For what purpose?

- Open the door please.
- Is this the person on record?
- Who are you?
- Can this smart card log me in?
- Am I the rightful owner of this password?



#### Biometric resources

- www.bioapi.org
- www.ibia.org
- www.biometricgroup.com
- www.biodigest.com
- www.biopassword.com



## Biopassword for Strong User Authentication

- 1. BioPassword Network for Windows
- BioPassword for NMAS (Novell)
- 3. BioPassword SDK



### Summary

- Biometrics field is old, industry is new
  - Entire industry was \$65M in 1999
- Not a technology issue but a people issue
  - Due diligence is key
- Biometrics helps with authentication
  - Nothing is absolute!

