



CAcert Inc.

## *Questions*

- ◆ Why are the people still using digital postcards?
- ◆ Why are the people still using passwords, and sending them in clear text?
- ◆ What can I do to protect me and my privacy?

## *Strategic goal*

- ◆ Privacy through encryption
- ◆ Security through authentication
- ◆ Trust for the Internet
- ◆ Solution for the chicken-and-egg problem:  
Certificates and applications

# Tasks of a CA

- ◆ „Certification Authority“
- ◆ A CA digitally binds the identity of persons and organisations („person-binding“)
- ◆ Issues digital certificates



# *Applications*

- ◆ Securing a Webserver with HTTPS
- ◆ Signing and encrypting Emails
  - ◆ SSL/TLS Server applications
  - ◆ Authentication for websites
  - ◆ Authentication for VPN's

## *CAcert Inc.*

- ◆ CAcert Inc. is a registered non-profit organisation based in Australia, which defines the rules and operates the servers
- ◆ Start [www.CAcert.org](http://www.CAcert.org): 2002
- ◆ Founding CAcert Inc.: 2003



## *Person-binding*

- ◆ Until now: Verification of the identity for every certificate, costs ~ 200,- USD per certificate per year
- ◆ What does it help, if I can afford a certificate, but the rest of the world can't?
- ◆ CAcert separates the Assurance (verification of the identity with gov. photo-ID) from the issuing of the certificates



## *Assurance*

- ◆ Assurance is a service, where an Assurer verifies the identity of a person
- ◆ with a governmental photo-ID
- ◆ and affirms for CAcert, and issues points on the life-long account at CAcert
- ◆ free market
- ◆ >2000 Assurer worldwide



## *Punkteschema*

- ◆ With 50 points you can issue certificates
- ◆ With 100 points you are an Assurer, you can give other people max. 10 points, and you get 2 points for it.
- ◆ Until 150 points, where you can give 35 points

# *Certificates*

- ◆ Life-long account at CAcert
- ◆ Issue certificates yourself anytime on the internet
- ◆ certificates are free of charge
- ◆ unlimited amount of certificates
- ◆ therefore you only have initial costs, no following costs

# *Technology*

- ◆ X.509 certificates
  - ◆ server certificates
  - ◆ client certificates
  - ◆ code-signing certificates (Java, Active-X, Cellular phones, ...)
  - ◆ IDN-Domains
- ◆ OpenPGP
  - ◆ OpenPGP Signatures
- ◆ CAcert is the first platform and technology neutral CA!

# *Security*

- ◆ CAcert is audited with a WebTrust compatible Audit, which is a worldwide recognized Audit for CA's
- ◆ 4-eyes principle everywhere
- ◆ open and transparent structure
- ◆ sourcecode is available for audits
- ◆ instant revocation lists

## *Success?*

- ◆ Verified Users: > 25.000
- ◆ Issued Certificates: > 43.000
- ◆ Assurers: > 2000
- ◆ in more than 29 countries
- ◆ translated in 14 languages
  
- ◆ <http://www.cacert.org/stats.php>

*Thank you very much*

- ◆ <http://www.cacert.org/>
- ◆ <http://wiki.cacert.org/>

Any questions?

