<u> חתימה דיגיטלית-אישור דיגיטלי - PKI</u>

כותב המאמר: אדוארדו פרכטנברג , מידען ועדת ענ"א.		
הקדמה – תפקיד המידען		
בתפקידו מלווה המידען את הפעילות השוטפת של הצוותים המקצועיים במטרה לספק מידע הן כללי והן פרטני		
על פי דרישה מקצועית) למען חשיפה יעילה ואמינה של אנשי הצוות למידע <u>רלוונטי ועדכני</u> . אופי הדינמי (
והקונסטרוקטיבי של התקדמות הפרוייקט בידי הצוות המקצועי מחייב דו-שיח ואינטראקציה בין משתמשי המידע		
לבין מפיקיה.		
. ראו את עצמכם רשאים להעביר את הערותיכם והארותיכם בנושא באופן פרטי ובמידענות באופן כללי		
	תודה	
אדוארדו פרכטנברג		
mailto:eduardo@mof.gov.il	02-5317674	טלפון:

How It Works

Assume you were going to send the draft of a will to your lawyer in another town. You want to give your lawyer the assurance that it was unchanged from what you sent and that it is really from you.

- 1. You copy-and-paste the will (it's a short one!) into an e-mail note.
- 2. Using special software, you obtain a message <u>hash</u> (mathematical summary) of the will.
- 3. You then use a private key that you have previously obtained from a publicprivate key authority to encrypt the hash.
- 4. The encrypted hash becomes your digital signature of the message. (Note that it will be different each time you send a message.)

At the other end, your lawyer receives the message.

- 1. To make sure it's intact and from you, your lawyer makes a hash of the received message.
- 2. Your lawyer then uses your public key to decrypt the message hash or summary.
- 3. If the hashes match, the received message is valid.

Selected Links

- Ronald Rivest's extensive list of <u>links to Cryptography and Security sites</u> is comprehensive.
- http://www.lycos.com/srch/?lpv=1&loc=searchhp&query=digital%20signatue

Sites relating to the overall issues DS/ES related: legislation, products, applications, CA, basic definitions and advanced features, electronic approval. (More than 155.000 sites referred).

The World Wide Web Consortium (W3C) describes its own Digital Signature Initiative.

BM's <u>Cryptography - Quick Overview</u> is a Lotus Freelance presentation that discusses both digital certificates and digital signatures.

digital certificate

A digital certificate is an electronic "credit card" that establishes your credentials when doing business or other transactions on the Web. It is issued by a certification authority (CA). It contains your name, a serial number, expiration dates, a copy of the certificate holder's public key (used for <u>encrypting and decrypting</u> messages and <u>digital signatures</u>), and the digital signature of the certificate-issuing authority so that a recipient can verify that the certificate is real. Some digital certificates conform to a standard, X.509. Digital certificates can be kept in registries so that <u>authenticated</u> users can look up other users' public keys.

Selected Links

■>IBM's <u>Security Technologies</u> site describes the X.509 certificate and the Public Key Infrastructure.

■<u>VeriSign</u> is the leading certificate authority, providing over 125,000 Web sites with <u>SSL</u> server certificates, mainly for use in e-commerce.

Assistance was provided by Eric Morley. Last update: October 12, 1999

> <u>http://www.youdzone.com/signature.html</u> מה זה חתימה דיגיטלית. <u>http://www.state.in.us/digitalsignatures/dsfaq.html</u> FAQ <u>http://www.entrust.com/entrust/whatsnew.htm</u> ,PKI product

http://www.lycos.com/srch/?lpv=1&loc=searchhp&query=digital%20signature

Sites relating to the overall issues DS/ES related: legislation, products, applications, CA, basic definitions and advanced features, electronic approval. (More than 155.000 sites referred).

http://www2.arnes.si/~rzjtopl/usa/elsig.htm

Adjusting technological and legal solutions in electronic commerce. http://www.zdnet.com/pcmag/stories/reviews/0,6755,394205,00.html

Certificates, Keys and Security. Content:

Solutions for Electronic Signature/Introduction/Certificate Authorities/Digital Certificates/Secure Web Services/Securing E-mail/Clients/ Software Publishing/not just Microsoft/ "Now it's legal to sign electronic documents electronically, but should you?"

Are digital signatures a threat?

Do we need to worry about government tracing and identity theft? A leading technology expert has warned that digital signatures, an increasingly prevalent Internet security technology, could hail a future devoid of privacy.

http://www.msnbc.com/modules/exports/ct_infobeat.asp?/news/467900.asp

http://alpha.qmw.ac.uk/~tl6345/

Review on links related to digital signature issues. Content:

- 1) Understanding the Technology (Criptography/ Biometrics/Infrastructure)
- 2) Trusted Third Parties and Certification Authorities(International and Nationals Initiatives)
- 3) Surveys on Electronic Commerce Law.