



## Background information on digital signatures

### Are digital signatures legal?

The eSign legislation states that *electronic* signatures have the same legal status as paper/pen-based signatures (i.e., making electronically signed transactions legally binding). The legislation is technology-neutral regarding what constitutes an electronic signature but many leading industries already have adopted or mandated PKI-based digital certificates (such as Healthcare and Pharmaceutical).

### How are "electronic signatures" different from "digital signatures"?

The e-Sign legislation specifically mentions "electronic" signatures which means any electronic means of authorizing a transaction. This could include physically signing an electronic tablet at a department store to authorize your credit card, or capturing your graphical signature and appending it to a file. These methods do not provide proof of signing, nor do they preserve the integrity of the transaction itself.

### What are digital signatures and digital certificates?

Digital signatures are cryptographically generated fingerprints binding a transaction to an identity. Being cryptographic in nature, and based on public-key technology, they ensure data cannot be tampered with and provide proof that someone actually signed a particular transaction. The ability to generate a digital signature can be controlled via authentication means such as UserID and Password, Smart Card and PIN, or Biometrics (fingerprints, retinal scan...).

Digital Certificates are like digital driver's licenses. They are your electronic identity that contains your unique "public" key so that others can encrypt for you. The certificate also binds you to your "private" key, which is used for digital signatures.

### What does this mean for e-business?

- Consumers will be able to purchase products/services over the Internet with convenience.
- *Governments and business can streamline operations and reduce costs.*
- E-businesses can strengthen online relationships with suppliers, customers and partners.
- In general, e-businesses will be deployed with greater speed, bringing information to market faster, and enhancing competitiveness and innovation.

### What role does Entrust play in digital signatures?

Entrust, Inc. is a world leader in securing digital identities and information, enabling businesses and governments to transform the way they conduct online transactions and manage relationships with customers, partners and employees. Over 1,200 enterprises and government agencies in more than 50 countries use Entrust's portfolio of security software solutions that integrate into the broad range of applications organizations use today to leverage the Internet and enterprise networks.

### Carrie-Lynn Bendzsa

Sr. Manager, Media Relations

Phone: 613-270-3455

Cell: 613-864-2127 Fax: 613-270-3412

#### Entrust

Securing Digital Identities & Information

<http://www.entrust.com/>