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Why use the Ordre’s digital signature provided by Notarius?

Even though the look of our handwritten signature has inevitably evolved over time, we can easily distinguish between our “John Hancock” and that of another. Our signature is a mark that is all our own.

Section 2827 of Civil Code of Québec defines a signature as follows: “A signature is the affixing by a person, to a writing, of his name or the distinctive mark which he regularly uses to signify his intention.”

The (handwritten) signature has always been associated with hard copy or paper documents while we are more and more called upon to sign technology based documents (computer based or electronic). Given the evolution in information technology and routinely used software, it has become commonplace to create a (digital) image of a (handwritten) signature to import it from one electronic document (file) to another or even to photocopy the image of a signature onto a paper document.

In doing so, the question begs: does importing the “image” of a (handwritten) signature in a given file or onto a photocopy constitute a real signature? In other words, is reproducing the image of a signature equivalent to the act of signing?

Certain characteristics are associated with a signature:

- a) the mark must identify the signatory in a unique way;
- b) the signatory alone must be able to produce the mark and use it regularly;
- c) through this mark, the signatory must be irrefutably bound to the terms of the document on which the signature appears (whether it is a paper document or one that is in electronic form);
- d) the mark that constitutes the signature must protect the integrity of the document to which it is affixed.

There is a big difference between affixing a (handwritten) signature and affixing the signature’s “image” by some sort of means of reproduction; the same can be said with respect to the image of the engineer’s seal.

The fact that one can copy the image of a (handwritten) signature without anyone being able to confirm who is actually carrying out the reproduction raises at least two questions:

- 1) Is there an irrefutable connection between the author of the (handwritten) signature in question and the other information found in the document?
- 2) Can the mere image of the (handwritten) signature irrefutably ensure the author’s identity and the integrity of the information found in the document?

Unfortunately, the answer to those two questions is no.

WHY SIGN?

One mainly signs a document for two reasons:

- a) to demonstrate the signatory’s consent;

The engineer’s digital signature allows engineers to ensure that their technology-based documents are functionally equivalent to hardcopy documents.

- b) to indicate the signatory’s identity and the connection that he or she has with the document he or she is signing.

FOR ENGINEERS, SIGNING OR AUTHENTICATING: ARE THEY ONE AND THE SAME?

The engineer who signs a document also does it for the two reasons previously mentioned.

Moreover, the regulatory framework governing the practice of engineering requires that engineers authenticate all their documents (see sections 24 and 25 of the Engineers Act, 3.04.01 and 3.04.02 of the Code of ethics of engineers, as well as the Guidelines for engineering documents).

The Ordre expects that engineers authenticate their documents. Authentication is a professional act which systematically includes the engineer’s mark, namely his or her (handwritten) signature, in addition to other elements.

In fact, the Guidelines for engineering documents provide the following definition with respect to the authentication of engineering documents (page 6):

“Depending on the type of document, this means affixing either the engineer’s signature, his professional title (engineer or Eng.) and his membership number or both his seal and signature, along with the date. In either case, if the engineering document is on a technology-based medium, the engineer will also include his digital signature on the document to complete the professional authentication. Both of these authentication methods have the same meaning in that they both attest to the authenticity and integrity of the engineering document, the identity of its author, the author’s qualification as an engineer, and the fact that the document was prepared by a member in good standing of the OIQ and in accordance with the laws, regulations and good practices applicable to the profession in Québec.”

Consequently, in order to comply with the obligations of their profession, engineers must affix an additional signature to their technology-based documents (computer-based or electronic) namely, their digital signature, with the Ordre's explicit consent, obtained by its authorized supplier, Notarius.

WHY USE A DIGITAL SIGNATURE?

The engineer's digital signature allows for a verification which provides unchallengeable proof of the identity of the person having signed a technology-based document. It also binds the author to the information contained in the document he or she signed, ensures the integrity of the data found in the (authenticated) document and certifies that the signatory is authorized to practise engineering.

WHY DOES THE ORDRE AUTHORIZE DIGITAL SIGNATURES?

The Ordre provides a digital signature to give engineers a tool for signing technology-based documents which complies with the requirements imposed by the Act to establish a legal framework for information technology as well as those found in the Guidelines for engineering documents. Both the engineer's seal and digital signature are closely linked to his or her licence to practise engineering and must be issued by the Ordre.

The engineer's digital signature, when used in accordance with the rules established by the Ordre (namely with images of the handwritten signature or of the seal, as the case may be), allows engineers to ensure that their technology-based documents are functionally equivalent to hardcopy documents.

A person who receives a paper copy or an electronic copy of an engineering document may not have any reason to doubt the authenticity of the reliability of such copy, but he or she does not have reason to rely on it with the necessary degree of certainty either. What's more, in a technological environment, the mere presence of an image of the engineer's seal or handwritten signature on a copy does not constitute in itself conclusive and unique proof of the engineer's identity, nor does it guarantee that the engineer is authorized to practise the profession.

Thus, it is the use of the engineer's digital signature which allows to maintain the public's trust with respect to technology-based engineering documents because the digital signature can:

- establish an irrefutable connection between the original information which constitutes a technology-based document (file) and the engineer who signed it, including the engineer's personal marks that could have been inserted (such as a handwritten signature and seal);
- confirm the authenticity and ensure the integrity of the information comprised in the document;
- confirm, beyond a shadow of a doubt, that the signatory holds a permit issued by the Ordre des ingénieurs du Québec and that he or she is responsible for the technology-based document in question, his or her work.

IN CONCLUSION

Consequently, the Ordre concluded in 2001 that the simple act of affixing digital images of an engineer's personal marks to a technology-based document, such as the image of a handwritten signature or that of his or her seal, does not constitute a valid authentication under the laws and regulations that govern the profession. These images alone do not establish an irrefutable connection between the document and its author, nor do they certify the authenticity and the integrity of the information found in technology-based documents.

For more information, please contact Notarius at 514 281-1442 or call toll free at 1 800 567-6703, ou visit www.ingenieur.notarius.com.

HOW DOES ONE AUTHENTICATE?

	Engineering documents on paper		Engineering documents in electronic format	
	Plans and specifications	Other documents	Plans and specifications	Other documents
NAME	Included on the ordre's seal	✓	Included on the ordre's seal	✓
ENG.	Included on the ordre's seal	✓	Included on the ordre's seal	✓
ORDRE MEMBERSHIP No.	Included on the ordre's seal	✓	Included on the ordre's seal	✓
HANDWRITENSIGNATURE	✓	✓	✓	✓
ORDRE'S SEAL	✓	N/A	✓	N/A
DATE	✓	✓	✓	✓
DIGITAL SIGNATURE AUTHORIZED BY THE ORDRE	N/A	N/A	✓	✓