

Digital Signatures

A On behalf of the Oregon Department of Transportation, Ron Singh, P.L.S., Geometronics Manager/Chief of Surveys, made a presentation to the Board demonstrating the value and benefits of the use of digital signatures. The presentation prompted a joint meeting in October 2007 with the Professional Practices Committee (PPC) and Rules & Regulations (R&R) Committee to continue the discussion of digital signatures. The purpose of the meeting was to develop regulations for utilizing digital signatures and procedures to ensure the security of documents. With the assistance of Ron Singh, P.L.S., the R&R Committee drafted language for Oregon Administrative Rules (OARs) 820-010-0010, 820-010-0620, and 820-015-0010 to incorporate the use of digital signatures. During the July 8, 2008 Board meeting, the amendments to the aforementioned rules were finalized.

As defined within OAR 820-010-0010; in particular subsection 16:

820-010-0010

Definitions

(16) "Digital signature" means a type of electronic signature, as allowed by the ORS 84.001 to 84.061, that transforms a message through the use of an algorithm or series of algorithms that provide a key pair, private and public, for signer verification, document security and authentication.

Often times the terms electronic signature and digital signature are misconstrued as the same terms. However, registrants are cautioned that the electronic signature and digital signature are distinctly different with respect to the information security world. The term electronic signature may include scanned images of handwritten signatures, typed notations or signature blocks, etc. without any authentication and/or encryption system. Whereas the term digital signature is used to describe a signature system applied to an electronic document that utilizes specific technical processes to provide significant added security, authentication, and/or encryption.

A digital signature enables "authentication" of digital documents, assuring the recipient of a digital document of both the identity of the sender and the integrity of the document. A digital signature provides "who" signed the digital file. A time stamp of that digital signature provides "when" the digital file was signed.

When using a digital signature, registrants must act in accordance with OAR 820-010-0620; in particular subsection 5:

820-010-0620

Official Seal

(5) A digital signature, as an option to a handwritten signature in permanent ink is acceptable for final documents.

- (a) The digital signature must be:
- (A) Unique to the registrant using it; and
 - (B) Capable of verification; and
 - (C) Under the sole control of the registrant using it; and

(D) Linked to a document in such a manner that the digital signature is invalidated if any data in the document is changed.

(b) Documents signed using a digital signature will bear the phrase "digital signature" in place of the handwritten signature.

It is important for registrants to be aware that if the Board processes a complaint and requests a digitally signed document, the registrant must comply with OAR 820-015-0010; in particular subsection 5.

820-015-0010

Processing Complaints

(5) Upon request of the Board, digitally signed documents must be provided to the Board in a form that can be processed by the Board's information processing systems.

As a reminder to Oregon registrants, the amendments to OAR 820-010-0010, 820-010-0620, and 820-015-0010 do not eliminate the use of handwritten signatures. For additional information or questions regarding official seals and final documents, please contact the Board office. ■