



Principles & Standards for Secure Internet E-Commerce

Mark D. Wood, Eastman Kodak

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Open to IEEE members and non-members

5:15PM Doors Open/Refreshments, 5:30 to 7:00PM Presentation

Kodak Theatre on the Ridge, Room 151

200 Ridge Road West, Rochester, NY

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Enter at Kodak Theater on the Ridge and follow the Computer Society meeting signs.

<http://ewh.ieee.org/r1/rochester/comsoc/>

Abstract

Are you curious as to how “SSL” works and what “PKI” is? Do you wonder if the emerging Web Services paradigm can be trusted? Do you need to build, plan or understand Web-based electronic commerce? If so, then this presentation is for you. I will begin by discussing basic security principles: authentication, authorization, non-repudiation, data integrity and privacy. I will give a primer on general Internet security techniques, including public-key cryptography and the Secure Sockets Layer (SSL) protocol. In the last portion of this talk, I will focus on techniques for making Web services secure. New standards have recently been issued or proposed for securing XML-based interactions. XML Digital Signature provides an XML-based encoding for digital signatures; XML Encryption defines a mechanism for encrypting all or portions of an XML document. These specifications may be used directly with basic public-key infrastructure and SSL building blocks or used as components of new frameworks such as WS-Security. I will summarize by giving an example of how these technology pieces can be put together to provide secure e-commerce via Web services.

Biography

Mark D. Wood leads a web and networking technologies group in Kodak's Research Labs, focusing on XML and security related technologies. He represents Kodak to the World Wide Web Consortium. Mark obtained a B.S. degree from the University of Vermont, and M.S. and Ph.D. degrees from Cornell University.

Upcoming Events

2/26/03 **“An Introduction to Use Case Modeling”**, Michael Donahue, Eastman Kodak
4/10/03 **“Object Recognition Using Large Structural Modelbases”**, Dr. Kim L. Boyer, Signal Analysis and Machine Perception Lab, The Ohio State University.
This Computer Society presentation will be at the Rochester Section Joint Chapters Meeting. Dinner Keynote: Merrill Buckley, longtime IEEE activist and former President of IEEE-USA.