

COMPUTER SCIENCE
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Digital Identity Management and Protection

Elisa Bertino

CS Department, CERIAS, Purdue University

Abstract: Digital identity management (DIM) has emerged as a critical foundation for supporting successful interaction in today's globally interconnected society. It is crucial not only for the conduct of business and government but also for a large and growing body of electronic or online social interactions. Digital identity management is usually coupled with the notion of federation. The goal of federations is to provide users with protected environments to federate identities by the proper management of identity attributes. Federations provide a controlled method by which federation members can provide more integrated and complete services to a qualified group of individuals within certain sets of business transactions. By controlling the scope of access to participating sites, and by enabling secure, cross-domain transmission of user's personal information, federations can make the perpetration of identity frauds more difficult, as well as reduce their frequency, and their potential impact. In this talk we will first discuss basic digital identity concepts and requirements towards DIM solutions and we will overview relevant initiatives currently undergoing in academia and industry. We will then focus on the problem of identity theft and discuss an initial solution to the problem of establishing and protecting digital identity.

Biography: Elisa Bertino is professor of Computer Science at Purdue University and serves as Research Director of the Center for Education and Research in Information Assurance and Security (CERIAS). Previously she was a faculty member at Department of Computer Science and Communication of the University of Milan where she directed the DB and SEC laboratory. She has been a visiting researcher at the IBM Research Laboratory (now Almaden) in San Jose, at the Microelectronics and Computer Technology Corporation, at Rutgers University, at Telcordia Technologies. Elisa Bertino is a Fellow member of IEEE and a Fellow member of ACM. She received the 2002 IEEE Computer Society Technical Achievement Award for "For outstanding contributions to database systems and database security and advanced data management systems" and the 2005 IEEE Computer Society Tsutomu Kanai Award "For pioneering and innovative research contributions to secure distributed systems".

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